

U. S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

**ANALYTICAL RESULTS, MINERALOGICAL DATA, AND
DISTRIBUTIONS OF ANOMALIES FOR ELEMENTS AND MINERALS IN THREE
MOTHER LODE-TYPE GOLD DEPOSITS, HODSON MINING DISTRICT,
CALAVERAS COUNTY, CALIFORNIA**

by

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This report is preliminary and has not been reviewed for conformity with U. S. Geological Survey editorial standards and stratigraphic nomenclature. Any use of trade names is for descriptive purposes only and does not imply endorsement by the USGS.

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INTRODUCTION

Although many geologic environments have been studied and explored for gold deposits in the last few decades, the classic Mother Lode environment in California was largely ignored until the 1980's. For a variety of reasons, including underground mining economics, metallurgical problems with ore treatment, lack of accessible land, and probably other factors, little attention was given to the gold resource potential of the Mother Lode region, and, consequently, modern scientific studies were not undertaken in this region. In recent years, however, the possibility of using surface mining methods, the adoption of newer techniques for recovering gold from the complex ores in the Mother Lode region, and other considerations have renewed interest in this environment.

Detailed descriptions that included information on the mineralogy and chemistry of various Mother Lode deposits were published many years ago when the underground mines of the region were still active and accessible (Knopf, 1929; Lindgren, 1896). The last of the underground mines was closed in 1942 and, except in the extreme northern part of the region, none has operated in recent years. As a result, little was written about the geological aspects of Mother Lode deposits between the 1940's and the 1980's, when exploration and mining in the region was renewed. Chemical and mineralogical data have been published for many gold deposits, some of which are probably Mother Lode analogues (see, for example, Boyle, 1979, and references therein). In spite of the renewed interest in the California deposits, however, only a few articles describing the abundances—and particularly the distributions—of suites of elements and minerals associated with Mother Lode-type deposits occurring in the United States have been published (see, for example, Chaffee and Hill, 1987; Chaffee and Kuhl, 1991; Coveney, 1981; Goldfarb, 1989; King, 1986; Kuhl and Garmoe, 1989; Landefeld and Silberman, 1987; Lechner and Kuhl, 1990; Nash, 1988; Silberman and Danielson, 1991).

To provide new information regarding the geochemistry of a typical Mother Lode-type deposit, we conducted a study in the Hodson mining district, which is in Calaveras County, California, in the westernmost foothills of the Sierra Nevada, several kilometers northwest of the settlement of Copperopolis and about 17 km west of the town of Angels Camp (Fig. 1). This district is in the West Gold Belt, which lies about 12 to 16 km west of, and generally parallel to, the better known Mother Lode Gold Belt in central California. The Hodson district produced more than \$6 million worth of gold between the 1880's and 1940's from underground mines (Clark, 1970). The two principal mines were the Royal, the largest and most productive mine in the West Belt, and the Mountain King (Clark and Lydon, 1962). Mining from three open pits began in 1989 (Lechner and Kuhl, 1990) and continued until 1994.

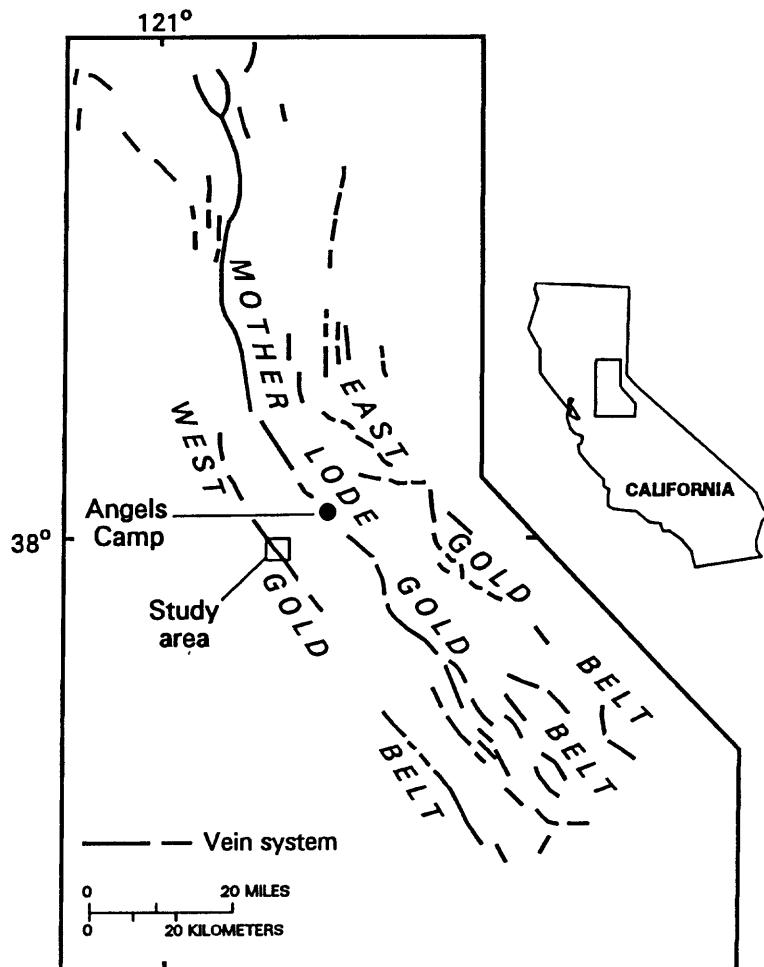


Figure 1.--Location of the study area

This report briefly describes (1) the regional geologic setting and general geology of the Hodson mining district and (2) the geology for three cross sections, each transecting a gold deposit in the district. In addition, the report provides details on the collection and analysis of 300 samples of drill core or cuttings, a tabulation of chemical and mineralogical data for 44 elements and 10 minerals, summary statistical data for these variables, and plots of anomalies for 42 chemical and 10 mineral variables on the three geologic cross sections.

This report consists of two parts. Part A is this printed report. Part B is an electronic version on a diskette that includes this text in ASCII format as well as the data in Appendices 1 and 2 in a binary format.

REGIONAL GEOLOGIC SETTING

The Hodson district is located in the West Gold Belt, a part of the Foothills Metamorphic Belt that lies along the west side of the central Sierra Nevada in California (Fig. 1). This belt is thought to comprise a Mesozoic submarine volcanic arc and adjacent back arc basin that were accreted onto the western margin of North America (Landefeld, 1990). Rocks present in the areas of the main Mother Lode Gold Belt (Melones Fault Zone) and the West Gold Belt include (1) mafic and ultramafic lava flows and breccias and (2) sedimentary sequences that were largely derived from these rocks and vary in grain size from conglomerates to argillites. All of these rocks were regionally metamorphosed to greenschist facies prior to the time of gold mineralization (Landefeld, 1990; Landefeld and Silberman, 1987).

The only significant difference between the rocks in the Mother Lode Belt and the West Belt is in the composition of the metamorphosed volcaniclastic units. Those in the West Belt are more felsic to intermediate in composition, suggesting that these rocks were probably derived from the mature, calc-alkaline parts of the same volcanic arc that is the source of most of the rocks found in the rest of the Foothills Metamorphic Belt (Landefeld and Snow, 1990).

Major faulting in Nevadan time created the Melones and Bear Mountain Fault Zones. Splays from the latter, especially the Hodson fault, structurally control the gold mineralization in the Hodson district. The gold deposits, described below, exhibit the same gross characteristics as those of the Melones Fault Zone at this latitude.

GEOLOGY OF THE HODSON DISTRICT

Figure 2 shows the geology of the Hodson area as illustrated by Lechner and Kuhl (1990), as well as the locations of three cross sections along which samples of drill cuttings or core were collected for this study. Two major rock units are present. The first is the Salt Spring Slate (Js on Fig. 2), which is of Late Jurassic age (Clark, 1964). In the study area this unit is predominantly a sequence of thin-bedded carbonaceous shales that have been metamorphosed to slates and phyllites.

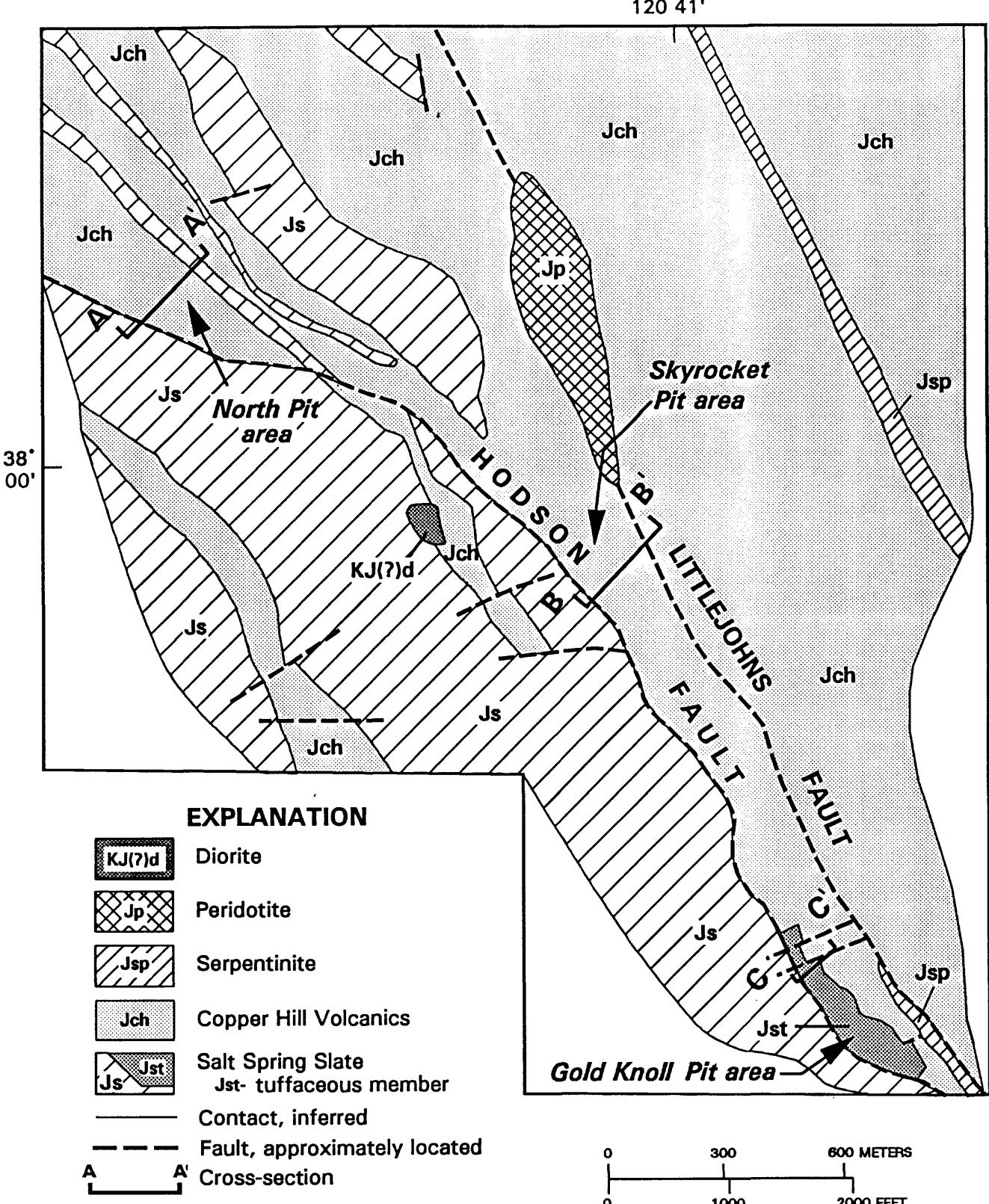


Figure 2.--Generalized geologic map of the Hodson district, Calaveras County, California. Modified from Lechner and Kuhl (1990)

Beds of pebble conglomerate are found locally. In the southern part of the study area, a sequence of thinly interbedded tuffaceous wackes and carbonaceous phyllites has been mapped locally as a part of this unit. This latter sequence has been informally named the tuffaceous member of the Salt Spring Slate (Jst on Fig. 2) (Kuhl and Garmoe, 1989).

The other major unit in the study area is the Copper Hill Volcanics (Jch on Fig. 2), which is also of Late Jurassic age (Clark, 1964). This unit consists of volcanic flows, flow breccias, and tuffs that range in composition from andesitic basalt to basalt and have been metamorphosed to produce massive to schistose sequences (Lechner and Kuhl, 1990). Regional metamorphism to greenschist facies has produced abundant chlorite that gives a green color (and thus the term "greenstone") to this unit.

Other small units crop out locally (Fig. 2). These consist of ultramafic rocks that include serpentinite (Jsp) and peridotite (Jp) of probable Late Jurassic age (Clark, 1964) and a small body of diorite (KJd), which by inference with other similar bodies is of probable Late Jurassic to Middle Cretaceous age (Clark, 1964).

Major NNW- to NW-trending, northeast-dipping, low-angle faults trend parallel to the regional strike of the rock units. The Hodson fault and its splays (Fig. 2), a part of the major Bear Mountain Fault Zone (Clark, 1964), are the major structural controls of gold ore in the district.

Common hydrothermal alteration minerals include quartz, pyrite, sericite, ankerite, and calcite, which are widespread, and albite and mariposite, which occur locally (Kuhl and Garmoe, 1989; Lechner and Kuhl, 1990). Gold occurs locally in the free state but mainly as inclusions or microveinlets in pyrite. Minor amounts of other sulfide minerals (principally chalcopyrite, arsenopyrite, sphalerite, galena, and tetrahedrite) have been identified in the district (Kuhl and Garmoe, 1989; Lechner and Kuhl, 1990).

GEOLOGY AND ALTERATION IN THE VICINITIES OF THE CROSS SECTIONS

Three sections through the district—each crossing one of the three ore deposits at a roughly perpendicular orientation to the Hodson fault—were selected for study. These sections are located on Fig. 2. Each is viewed facing northwest. The locations of the drill holes that were sampled for each section are shown for reference (Figs. 3 to 5). All holes were collared within 20 m of the plane of the respective sections. The areas of significant weathering shown on each section were defined on the basis of the amount of visible secondary iron oxides in the samples collected for analysis. These areas are labelled as the "oxide zone" on each section. The geologic descriptions that follow are largely those of Kuhl and Garmoe (1989) and Lechner and Kuhl (1990), supplemented by our own observations.

The northernmost of the three deposits is in the North Pit and is shown on Section A-A' (Fig. 3). The geology of the overall area of the pit is structurally complex (Lechner and

A'

A

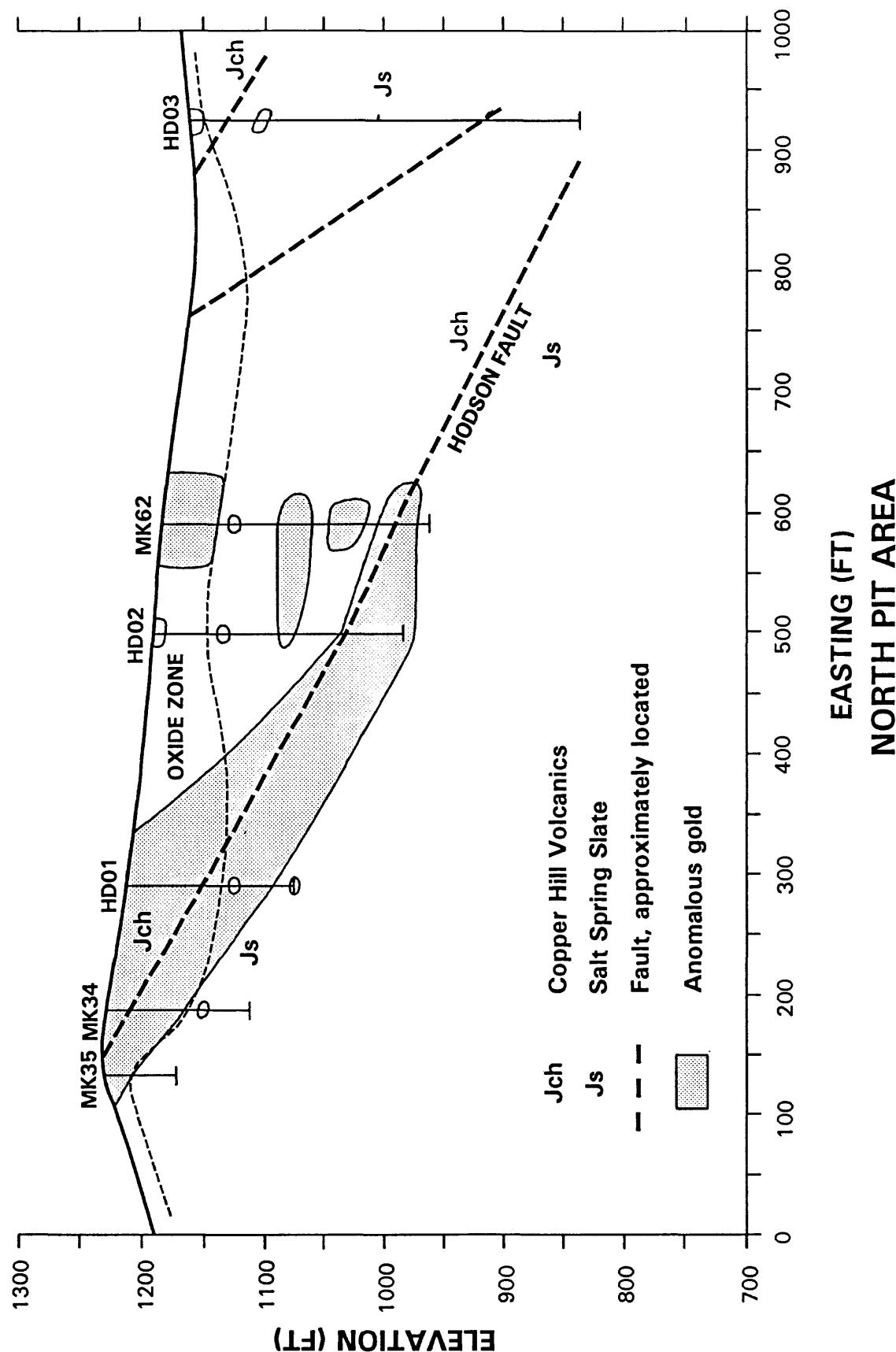


Figure 3.--Geologic map for Section A-A' through the North Pit, Hodson district. Shaded areas show the distribution of anomalous gold. For location of A-A' see Figure 2.

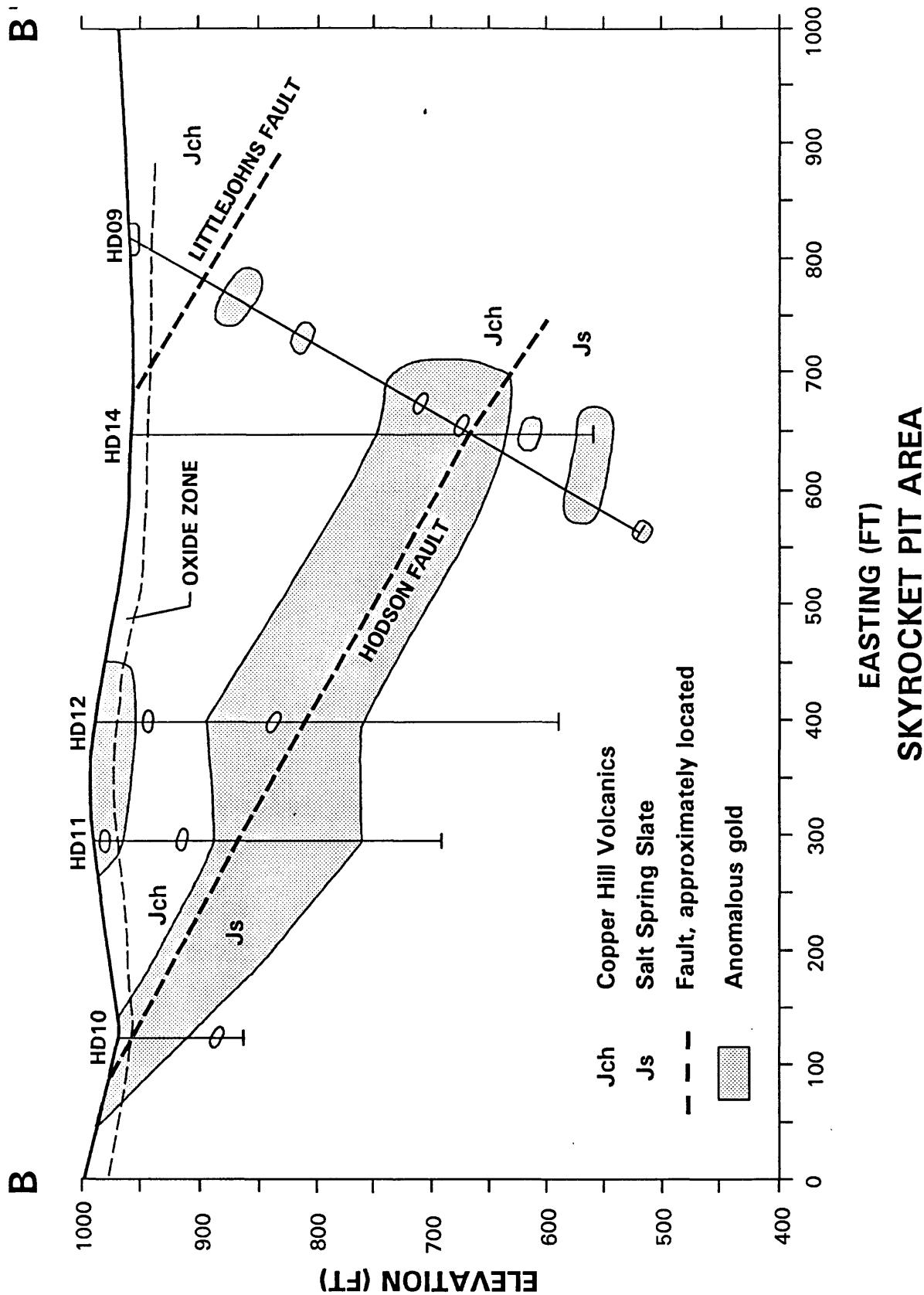


Figure 4.--Geologic map for Section B-B' through the Skyrocket Pit, Hodson district. Shaded areas show the distribution of anomalous gold. For location of B-B' see Figure 2.

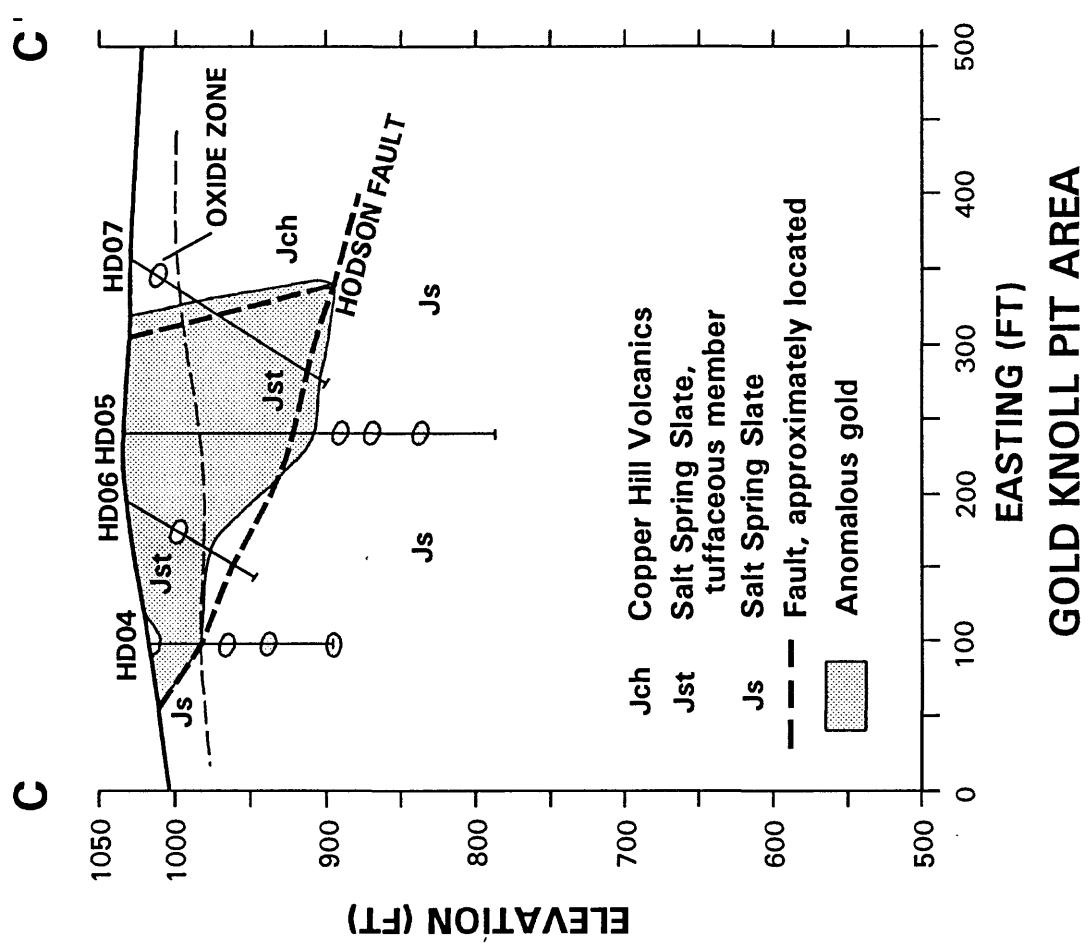


Figure 5.--Geologic map for Section C-C' through the Gold Knoll Pit, Hodson district. Shaded areas show the distribution of anomalous gold. For location of C-C' see Figure 2.

Kuhl, 1990) and has been simplified for the cross section. In general, in the area of the section, the Hodson fault separates the Copper Hill Volcanics unit in the hanging wall from the Salt Spring Slate unit in the footwall. Other faults farther east form contacts on either side of a block of Salt Spring Slate. The Copper Hill Volcanics is the dominant ore host in this area. Hydrothermal alteration, which is more extensive here in the Copper Hill Volcanics, has visibly bleached this unit as a result of the destruction of chlorite and other mafic minerals and has also locally bleached the Salt Spring Slate as a result of the leaching of carbon and the destruction of mafic minerals. Oxidation related to weathering extends as deep as 24 m (80 ft) in the vicinity of the section (Fig. 3). Common alteration minerals identified either by visual inspection or X-ray diffraction analysis include quartz, white mica, plagioclase feldspar, kaolinite, pyrite, calcite, other mixed-element carbonates (all here called ankerite), magnesite, talc or pyrophyllite, smectites, and locally, mariposite (Cr-rich white mica).

The middle deposit is in the Skyrocket Pit and is shown on Section B-B' (Fig. 4). In this area, the Hodson fault also separates the overlying Copper Hill Volcanics from the Salt Spring Slate. However, here the Salt Spring Slate is the dominant ore host. Alteration and ore minerals are similar to those described for these same two units in the North Pit area. Oxidation related to weathering is relatively shallow here and occurs to depths of only about 8 m (27 ft) in the vicinity of the section (Fig. 4).

The southernmost deposit, in the Gold Knoll Pit, is shown on Section C-C' (Fig. 5). In the area of the section, the Hodson fault separates the hanging wall block containing the Copper Hill Volcanics (Jch) and the tuffaceous member of the Salt Spring Slate (Jst) from the footwall block containing the Salt Spring Slate (Js). The dominant ore host-rocks in the Gold Knoll Pit area are the Copper Hill Volcanics and the tuffaceous member of the Salt Spring Slate. Alteration assemblages in the Copper Hill Volcanics and the Salt Spring Slate are similar to those described for the other two areas. Alteration in the tuffaceous member is similar to that of the rest of the Salt Spring Slate. The effects of weathering extend to depths of as much as 22 m (73 ft) in the vicinity of the section (Fig. 5).

COLLECTION AND PREPARATION OF SAMPLES

Three hundred samples of core or cuttings from 17 drill holes were collected and analyzed for this study. The samples were collected from approximately 1.5- to 3-m (5- to 10-ft) runs along the length of each hole. Each sample was composited from material most closely representing typical rock lithology, alteration, and mineralization in a given run. In some cases no sample was collected for a desired interval because no suitable material was available.

The samples were crushed, if necessary, in a jaw crusher with steel plates. All samples were ground in a vertical pulverizer

with ceramic plates to produce material passing a 0.15-mm (100-mesh) sieve. The samples were submitted in random sequence to the USGS analytical laboratories in Denver.

ANALYSIS OF SAMPLES

The samples were analyzed for 44 variables. They were analyzed for 31 elements (Al, As, Ba, Be, Ca, Ce, Co, Cr, Cu, Eu, Fe, Ga, K, La, Li, Mg, Mn, Na, Nb, Nd, Ni, P, Pb, Sc, Sr, Th, Ti, V, Y, Yb, and Zn) by a total digestion, inductively coupled plasma-atomic emission spectrometry (ICP-AES) method (Briggs, 1990), for 5 elements (Ag, Bi, Cd, Mo, and Sb) by a partial-digestion ICP method (Motooka, 1990), for Au, Te, and Tl by atomic-absorption spectrophotometry (O'Leary and Chao, 1990), for Hg and W by atomic-absorption spectrophotometry (O'Leary and others, 1990; O'Leary and Welsch, 1990), for total sulfur by a combustion technique (Curry, 1990), and for SiO₂ by X-ray fluorescence (Taggart and others, 1990). In addition, the weight loss on ignition at 925°C (LOI) was determined by a gravimetric method (Taggart and others, 1990). This loss largely reflects the loss of CO₂, resulting from the destruction of carbonate minerals and, to a much lesser extent, the loss of H₂O and other relatively volatile species.

Unless otherwise stated for a given standard analytical procedure, the analysts included a set with one sample duplicate, one analysis method blank, and two reference samples in each job of 40 or less samples. The arithmetic mean and standard deviation of reference materials and duplicate samples were calculated in order to estimate accuracy and precision for each analytical method. A given analytical method was generally considered sufficiently accurate if the absolute value of the laboratory mean minus the best defined reported value was less than or equal to four times the estimated within-laboratory standard deviation. Generally, for the major elements (those commonly occurring in concentrations greater than 1 percent), a relative standard deviation (RSD) less than 1 to 2 percent was considered adequate for precision. For minor elements (those commonly occurring in concentrations of 0.1 to 1.0 percent) a RSD less than 5 percent was considered adequate, and for trace elements (concentrations generally less than 0.1 percent), a RSD of less than 15 percent was considered adequate. The quality assurance manual for the USGS Branch of Geochemistry (Arbogast, 1990) contains estimates of typical performance capabilities for different sample matrices and analyte concentrations, as well as specific data concerning the accuracy and precision of the techniques described above.

The analytical results are tabulated in appendix 1. Data on these analyses are summarized by lithologies in tables 1 to 3. Two elements (Bi and Eu) were not found in many samples in concentrations above their respective lower limits of determination (0.60 ppm for Bi and 2 ppm for Eu), and thus these elements were not further studied.

Table 1.--Statistical summary for 139 samples of core and cuttings from the Copper Hill Volcanics (Jch) unit, Hodson mining district, California

[All values shown in parts per million unless "%" shown. N=not detected at lower limit of determination shown in parentheses. L=detected but in a concentration less than the lower limit of determination shown in parentheses. Leaders (---)=value not significant]

Variable	Range of values		Percent unqualified	Geometric mean	Percentiles				
	Minimum	Maximum			2	5	10	15	20
Ag	N(0.045)	9.2	72	0.26	N(0.045)	N(0.045)	N(0.045)	N(0.045)	N(0.045)
Al (%)	0.13	9.82	100	5.34	0.22	1.48	2.64	3.89	4.65
As	L(10)	530	64	62	L(10)	L(10)	L(10)	L(10)	L(10)
Au	N(0.002)	40	77	0.013	N(0.002)	L(0.002)	L(0.002)	L(0.002)	L(0.002)
Ba	4	660	100	105	6	10	33	44	66
Be	L(1)	3.0	41	1.3	L(1)	L(1)	L(1)	L(1)	L(1)
Bi	N(0.60)	0.64	3	---	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)
Ca (%)	0.03	13.5	100	3.53	0.08	0.31	0.47	0.75	2.04
Cd	N(0.030)	0.86	94	0.09	N(0.030)	N(0.030)	0.038	0.047	0.054
Ce	L(4)	55	49	26	L(4)	L(4)	L(4)	L(4)	L(4)
Co	3	115	100	34	6	12	18	22	24
Cr	7	2380	100	220	18	24	39	52	58
Cu	5	345	100	54	8	11	24	33	39
Eu	L(2)	3.0	22	---	L(2)	L(2)	L(2)	L(2)	L(2)
Fe (%)	1.05	8.12	100	5.51	1.48	3.31	4.15	4.64	4.86
Ga	L(4)	23	95	13	L(4)	6	7	8	9
Hg	N(0.02)	1.3	76	0.05	N(0.02)	N(0.02)	N(0.02)	N(0.02)	N(0.02)
K (%)	L(0.05)	3.29	91	0.80	L(0.05)	L(0.05)	0.06	0.14	0.22
La	L(2)	31	88	7.2	L(2)	L(2)	L(2)	2	2
Li	L(2)	100	99	20	3	3	4	5	8
LOI (%)	0.79	34.7	100	7.98	1.54	3.10	3.72	4.10	4.55
Mg (%)	0.06	21.1	100	3.13	0.11	0.33	1.12	1.27	1.42
Mn	28	3030	100	898	117	404	533	684	742
Mo	N(0.09)	2.0	88	0.27	N(0.09)	N(0.09)	N(0.09)	0.12	0.13
Na (%)	0.02	3.23	100	1.01	0.04	0.09	0.21	0.41	0.55
Nb	L(4)	22	26	11	L(4)	L(4)	L(4)	L(4)	L(4)
Nd	L(4)	39	88	11	L(4)	L(4)	L(4)	4	5
Ni	7	1430	100	93	13	16	22	24	27
P (%)	L(0.005)	0.24	86	0.05	L(0.005)	L(0.005)	L(0.005)	0.006	0.01
Pb	L(4)	162	64	8.3	L(4)	L(4)	L(4)	L(4)	L(4)
S (%)	L(0.05)	1.00	42	0.13	L(0.05)	L(0.05)	L(0.05)	L(0.05)	L(0.05)
Sb	N(0.60)	16	51	1.9	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)
Sc	3	48	100	24	4	5	11	17	20
SiO ₂ (%)	21.8	92.3	100	48.7	28.2	35.2	37.4	39.5	41.4
Sr	12	798	100	170	18	31	43	52	61
Te	N(0.005)	0.85	60	0.016	N(0.005)	L(0.005)	L(0.005)	L(0.005)	L(0.005)
Th	L(4)	4	1	---	L(4)	L(4)	L(4)	L(4)	L(4)
Ti (%)	L(0.005)	1.12	96	0.22	L(0.005)	0.02	0.03	0.04	0.06
Tl	N(0.05)	0.40	64	0.14	N(0.05)	N(0.05)	N(0.05)	N(0.05)	L(0.05)
V	8	398	100	177	22	40	100	121	138
W	N(0.5)	36	96	2.3	L(0.5)	0.5	1.0	1.0	1.0
Y	L(2)	29	96	11	L(2)	3	4	5	5
Yb	L(1)	3.0	67	1.6	L(1)	L(1)	L(1)	L(1)	L(1)
Zn	16	319	100	55	19	22	29	33	37

Table 1.--Continued

[All values shown in parts per million unless "%" shown. N=not detected at lower limit of determination shown in parentheses. L=detected but in a concentration less than the lower limit of determination shown in parentheses] .

Variable	Percentiles									
	25	40	50	60	75	80	85	90	95	98
Ag	N(0.045)	0.061	0.13	0.20	0.42	0.53	0.74	1.0	1.4	2.5
Al (%)	5.00	5.99	6.76	7.37	8.04	8.29	8.66	8.92	9.05	9.45
As	L(10)	10	20	40	100	130	170	245	325	465
Au	0.002	0.002	0.004	0.006	0.019	0.05	0.10	0.23	3.70	1.93
Ba	78	103	121	149	185	216	263	301	387	524
Be	L(1)	L(1)	L(1)	1	1	1	1	2	2	2
Bi	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	0.61
Ca (%)	3.30	5.33	5.70	6.11	6.73	7.13	7.38	8.57	10.1	12.3
Cd	0.062	0.072	0.077	0.086	0.13	0.13	0.15	0.16	0.27	0.40
Ce	L(4)	L(4)	L(4)	8	40	44	46	49	51	53
Co	25	31	36	39	52	56	60	72	81	89
Cr	63	122	346	430	662	745	833	1120	1490	1940
Cu	44	53	59	68	85	90	96	102	117	139
Eu	L(2)	L(2)	L(2)	L(2)	L(2)	2	2	2	2	2
Fe (%)	5.03	5.71	5.96	6.19	6.63	6.82	6.97	7.21	7.49	7.72
Ga	10	12	13	15	19	19	20	21	21	22
Hg	0.02	0.02	0.04	0.04	0.08	0.10	0.12	0.20	0.29	0.49
K (%)	0.36	0.74	0.93	1.22	1.46	1.62	1.86	2.24	2.65	3.12
La	3	3	4	5	22	23	25	26	28	28
Li	12	23	27	32	39	41	43	48	58	76
LOI (%)	5.03	6.42	7.31	8.71	14.1	16.8	17.7	21.1	24.8	30.5
Mg (%)	1.68	2.12	4.59	5.00	6.75	7.54	9.07	10.9	12.4	16.1
Mn	799	997	1080	1130	1210	1230	1260	1290	1420	1600
Mo	0.15	0.18	0.20	0.24	0.38	0.48	0.62	0.83	0.99	1.2
Na (%)	0.70	1.15	1.46	1.80	2.14	2.24	2.37	2.47	2.78	2.96
Nb	L(4)	L(4)	L(4)	L(4)	4	7	10	16	19	20
Nd	5	7	7	9	27	29	30	32	33	34
Ni	29	65	106	141	241	284	336	428	517	848
P (%)	0.01	0.02	0.03	0.04	0.13	0.14	0.16	0.17	0.19	0.22
Pb	L(4)	4	5	6	7	9	11	14	27	80
S (%)	L(0.05)	L(0.05)	L(0.05)	0.05	0.11	0.13	0.16	0.19	0.34	0.47
Sb	N(0.60)	N(0.60)	0.67	0.91	1.8	2.3	2.8	4.3	6.1	8.1
Sc	22	25	27	30	37	40	40	42	44	46
SiO ₂ (%)	43.2	46.4	48.1	50.2	53.0	54.8	59.6	67.3	79.3	90.1
Sr	77	120	212	292	403	459	516	592	692	743
Te	L(0.005)	0.005	0.005	0.010	0.015	0.020	0.030	0.048	0.080	0.11
Th	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)
Ti (%)	0.07	0.21	0.28	0.31	0.53	0.80	0.89	0.97	1.02	1.05
Tl	L(0.05)	0.05	0.10	0.10	0.20	0.20	0.25	0.28	0.33	0.35
V	146	195	210	242	256	264	286	296	324	352
W	1.0	1.0	1.5	2.0	4.0	5.0	7.0	11	18	21
Y	5	10	11	13	18	20	22	22	24	26
Yb	L(1)	1	1	2	2	2	2	2	3	3
Zn	41	50	54	58	71	77	90	97	124	211

Table 2.--Statistical summary for 118 samples of core and cuttings from the Salt Spring Slate (Js), Hodson mining district, California

[All values shown in parts per million unless "%" shown. N=not detected at lower limit of determination shown in parentheses. L=detected but in a concentration less than the lower limit of determination shown in parentheses. ---=value not significant]

Variable	Range of values		Percent unqualified	Geometric mean	Percentiles				
	Minimum	Maximum			2	5	10	15	20
Ag	0.046	9.2	100	0.58	0.096	0.11	0.13	0.16	0.17
Al (%)	0.55	9.92	100	6.05	2.62	3.74	4.58	4.88	5.05
As	L(10)	800	98	74	15	20	20	20	30
Au	N(0.002)	1.3	57	0.017	N(0.002)	N(0.002)	N(0.002)	N(0.002)	N(0.002)
Ba	31	1140	100	380	74	111	147	158	237
Be	L(1)	3.0	86	1.4	L(1)	L(1)	L(1)	1	1
Bi	N(0.60)	0.78	1	--	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)
Ca (%)	0.03	9.40	100	2.05	0.26	0.36	0.95	1.37	1.58
Cd	N(0.030)	0.98	99	0.27	0.14	0.14	0.16	0.18	0.19
Ce	L(4)	55	98	19	6	7	12	13	14
Co	2	41	100	16	8	11	11	12	13
Cr	4	260	100	98	47	53	65	72	80
Cu	6	130	100	49	20	26	30	31	33
Eu	L(2)	L(2)	0	--	L(2)	L(2)	L(2)	L(2)	L(2)
Fe (%)	0.65	6.46	100	4.21	2.47	2.84	3.24	3.36	3.55
Ga	L(4)	24	99	14	7	9	10	11	11
Hg	0.02	0.74	100	0.14	0.04	0.05	0.08	0.08	0.09
K (%)	L(0.05)	4.14	99	1.65	0.37	0.82	1.04	1.17	1.27
La	L(2)	27	99	10	4	5	7	7	8
Li	L(2)	75	99	14	3	3	3	3	4
LOI (%)	0.74	21.2	100	6.81*	3.62	4.02	4.44	4.97	5.22
Mg (%)	0.03	6.93	100	1.55	0.45	0.66	1.18	1.31	1.37
Mn	14	1690	100	615	272	310	391	440	493
Mo	0.13	5.3	100	0.91	0.21	0.33	0.48	0.57	0.65
Na (%)	0.13	3.74	100	1.01	0.27	0.32	0.43	0.55	0.65
Nb	L(4)	7	25	--	L(4)	L(4)	L(4)	L(4)	L(4)
Nd	L(4)	25	99	12	6	7	8	9	10
Ni	6	180	100	53	24	29	35	38	41
P (%)	0.01	0.21	100	0.08	0.03	0.03	0.04	0.05	0.06
Pb	5	98	100	17	6	8	10	11	12
S (%)	L(0.05)	5.58	89	0.61	L(0.05)	L(0.05)	L(0.05)	0.15	0.21
Sb	N(0.60)	12	99	2.2	0.80	0.96	1.1	1.2	1.3
Sc	L(2)	34	99	14	8	10	11	12	12
SiO ₂ (%)	38.8	95.5	100	61.2*	43.6	46.0	52.6	56.5	58.0
Sr	9	1120	100	220	73	85	102	126	146
Te	L(0.005)	0.80	99	0.041	0.008	0.010	0.018	0.020	0.025
Th	L(4)	10	52	5.7	L(4)	L(4)	L(4)	L(4)	L(4)
Ti (%)	0.01	0.37	100	0.13	0.04	0.06	0.06	0.07	0.08
Tl	N(0.05)	0.55	97	0.21	N(0.05)	0.08	0.10	0.15	0.15
V	11	237	100	118	58	76	81	88	93
W	L(0.5)	17	99	3.1	1.0	1.0	1.0	1.5	1.5
Y	L(2)	24	99	10	6	7	8	8	9
Yb	L(1)	3	78	1.4	L(1)	L(1)	L(1)	L(1)	L(1)
Zn	22	250	100	104	46	53	64	71	79

* Mean value based on 117 samples

Table 2.--Continued

[All values shown in parts per million unless "%" shown. N=not detected at lower limit of determination shown in parentheses. L=detected but in a concentration less than the lower limit of determination shown in parentheses] .

Variable	Percentiles									
	25	40	50	60	75	80	85	90	95	98
Ag	0.20	0.32	0.50	0.79	1.7	1.9	3.1	4.0	4.8	5.6
Al (%)	5.24	5.94	6.50	6.84	7.37	7.72	7.85	8.17	8.71	8.96
As	30	40	60	80	160	230	265	345	460	530
Au	N(0.002)	L(0.002)	0.002	0.004	0.014	0.023	0.075	0.15	0.43	0.63
Ba	310	388	469	531	611	627	682	717	765	788
Be	1	1	1	1	2	2	2	2	3	3
Bi	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)
Ca (%)	1.67	2.22	2.36	2.61	3.14	3.33	3.52	3.74	5.50	6.19
Cd	0.20	0.25	0.28	0.31	0.36	0.38	0.41	0.42	0.47	0.56
Ce	15	18	20	21	24	25	28	32	41	43
Co	14	15	16	17	20	21	24	27	31	34
Cr	82	94	102	111	125	128	134	145	159	191
Cu	36	51	54	57	64	66	70	79	91	111
Eu	L(2)	L(2)	L(2)	L(2)	L(2)	L(2)	L(2)	L(2)	L(2)	L(2)
Fe (%)	3.79	4.33	4.50	4.69	4.87	4.95	5.07	5.30	5.59	5.72
Ga	12	13	14	14	16	17	17	18	20	21
Hg	0.10	0.12	0.14	0.17	0.21	0.23	0.24	0.28	0.42	0.48
K (%)	1.34	1.52	1.69	1.81	2.12	2.28	2.56	2.97	3.44	3.81
La	8	9	10	11	12	13	15	17	21	23
Li	4	8	14	27	43	47	52	55	59	66
LOI (%)	5.55	6.24	6.85	7.74	8.62	8.93	9.48	10.3	11.4	13.3
Mg (%)	1.48	1.58	1.64	1.70	1.80	1.87	2.00	2.08	2.62	3.63
Mn	534	595	652	714	773	797	870	957	1120	1380
Mo	0.73	0.87	0.92	1.0	1.3	1.3	1.4	1.6	2.2	2.7
Na (%)	0.72	1.01	1.14	1.35	1.45	1.49	1.67	1.82	2.36	2.61
Nb	L(4)	L(4)	L(4)	L(4)	L(4)	4	5	5	6	6
Nd	10	11	11	13	15	15	17	18	22	24
Ni	43	52	55	60	67	71	73	79	88	106
P (%)	0.06	0.08	0.09	0.09	0.10	0.11	0.11	0.12	0.14	0.14
Pb	13	15	17	19	21	23	26	28	32	48
S (%)	0.25	0.39	0.50	0.65	1.00	1.23	1.79	2.30	2.92	3.27
Sb	1.4	1.7	1.9	2.2	3.3	3.9	4.3	5.1	6.3	7.6
Sc	13	14	15	16	16	17	17	19	20	25
SiO ₂ (%)	58.7	61.3	62.4	63.6	65.2	65.9	66.4	68.7	72.3	76.3
Sr	179	214	235	256	300	324	347	399	514	758
Te	0.030	0.040	0.040	0.045	0.058	0.065	0.073	0.095	0.10	0.18
Th	L(4)	L(4)	4	5	6	6	7	7	7	8
Ti (%)	0.09	0.12	0.14	0.16	0.19	0.20	0.21	0.23	0.27	0.29
Tl	0.15	0.20	0.20	0.25	0.30	0.30	0.30	0.35	0.35	0.43
V	95	114	124	126	150	157	162	172	193	212
W	2.0	2.5	3.0	4.0	5.0	6.0	6.0	7.0	9.0	14
Y	9	10	11	12	13	13	14	14	15	17
Yb	1	1	1	1	2	2	2	2	2	2
Zn	87	103	112	122	133	136	145	150	160	181

Table 3.--Statistical summary for 43 samples of core and cuttings from the tuff member of the Salt Spring Slate (Jst), Hodson mining district, California

[All values shown in parts per million unless "%" shown. N=not detected at lower limit of determination shown in parentheses. L=detected but in a concentration less than the lower limit of determination shown in parentheses. ---=value not significant]

Variable	Range of values		Percent unqualified	Geometric mean	Percentiles				
	Minimum	Maximum			2	5	10	15	20
Ag	0.096	16	100	1.2	0.12	0.15	0.16	0.22	0.32
Al (%)	1.81	8.06	100	5.27	1.85	2.47	3.34	3.74	4.09
As	20	340	98	110	20	30	35	40	60
Au	N(0.002)	26	93	0.23	N(0.002)	0.002	0.002	0.003	0.007
Ba	65	753	100	177	66	84	90	107	111
Be	L(1)	2.0	40	1.1	L(1)	L(1)	L(1)	L(1)	L(1)
Bi	N(0.60)	N(0.60)	0	---	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)
Ca (%)	0.18	8.55	100	3.96	0.31	1.03	1.39	2.63	2.92
Cd	0.036	1.20	100	0.14	0.041	0.049	0.059	0.076	0.079
Ce	L(4)	35	58	11	L(4)	L(4)	L(4)	L(4)	L(4)
Co	10	46	100	22	11	11	12	4	14
Cr	22	1240	100	170	30	49	79	90	112
Cu	12	183	100	57	18	24	29	33	37
Eu	L(2)	L(2)	0	---	L(2)	L(2)	L(2)	L(2)	L(2)
Fe (%)	1.69	8.49	100	4.35	2.01	2.76	3.05	3.25	3.46
Ga	L(4)	17	98	11	5	6	8	9	10
Hg	N(0.02)	2.9	91	0.08	N(0.02)	N(0.02)	0.02	0.02	0.02
K (%)	0.68	3.08	100	1.61	0.71	0.86	0.94	1.11	1.25
La	L(2)	17	98	5	2	2	2	3	3
Li	L(2)	91	72	7	L(2)	L(2)	L(2)	L(2)	L(2)
LOI (%)	4.19	21.4	100	10.7	4.27	5.51	6.38	6.97	7.72
Mg (%)	0.53	5.79	100	2.52	0.59	0.67	1.00	1.33	1.61
Mn	315	1670	100	740	317	357	416	474	524
Mo	0.92	3.6	100	0.33	0.09	0.10	0.10	0.12	0.13
Na (%)	0.07	3.61	100	0.66	0.09	0.11	0.14	0.23	0.29
Nb	L(4)	L(4)	0	---	L(4)	L(4)	L(4)	L(4)	L(4)
Nd	L(4)	20	88	8.4	L(4)	L(4)	5	5	6
Ni	24	476	100	72	25	29	36	38	44
P (%)	L(0.005)	0.12	88	0.03	L(0.005)	L(0.005)	0.005	0.007	0.008
Pb	4	289	98	13	4	5	5	6	6
S (%)	L(0.05)	5.30	60	0.79	L(0.05)	L(0.05)	L(0.05)	L(0.05)	L(0.05)
Sb	N(0.60)	33	95	3.0	N(0.60)	0.66	0.87	0.99	1.2
Sc	9	42	100	22	9	10	11	13	16
SiO ₂ (%)	35.0	78.3	100	53.1	36.5	39.3	41.7	44.9	45.8
Sr	59	885	100	272	60	63	79	115	182
Te	L(0.005)	1.25	86	0.060	L(0.005)	L(0.005)	L(0.005)	0.005	0.005
Th	L(4)	7	14	---	L(4)	L(4)	L(4)	L(4)	L(4)
Ti (%)	0.02	0.16	100	0.06	0.02	0.03	0.03	0.04	0.04
Tl	0.05	0.55	100	0.23	0.08	0.10	0.15	0.15	0.15
V	51	249	100	141	55	71	79	87	99
W	1.0	10	100	4.0	1.5	2.0	2.5	2.5	2.5
Y	2	13	100	5	3	4	4	4	4
Yb	L(1)	2	14	---	L(1)	L(1)	L(1)	L(1)	L(1)
Zn	9	393	100	55	11	20	27	32	35

Table 3.--Continued

[All values shown in parts per million unless "%" shown. N=not detected at lower limit of determination shown in parentheses. L=detected but in a concentration less than the lower limit of determination shown in parentheses] .

Variable	Percentiles									
	25	40	50	60	75	80	85	90	95	98
Ag	0.41	0.85	1.4	2.2	4.0	4.6	4.9	5.7	7.7	12
Al (%)	4.62	5.49	5.75	6.15	6.98	7.13	7.54	7.60	7.85	8.05
As	75	100	120	150	175	195	210	230	280	330
Au	0.012	0.13	0.30	0.48	1.05	2.05	3.75	6.45	13	22
Ba	119	149	166	184	240	284	295	358	475	669
Be	L(1)	L(1)	L(1)	1	1	1	1	1	1.5	2
Bi	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)	N(0.60)
Ca (%)	3.27	4.06	5.45	5.75	6.70	7.27	7.55	7.81	7.94	8.41
Cd	0.084	0.11	0.13	0.17	0.21	0.26	0.29	0.37	0.55	0.98
Ce	L(4)	L(4)	5	8	12	14	16	18	21	33
Co	17	20	23	26	31	32	36	40	43	46
Cr	118	141	167	191	263	286	316	413	561	965
Cu	42	57	67	75	84	88	94	103	116	155
Eu	L(2)	L(2)	L(2)	L(2)	L(2)	L(2)	L(2)	L(2)	L(2)	L(2)
Fe (%)	3.70	4.33	4.59	4.80	5.09	5.26	5.51	5.96	6.44	7.76
Ga	10	11	11	12	14	14	15	15	16	17
Hg	0.04	0.05	0.08	0.10	0.13	0.16	0.20	0.23	0.31	1.63
K (%)	1.29	1.53	1.66	1.84	2.08	2.15	2.17	2.64	2.71	2.98
La	3	4	4	5	7	8	9	10	11	16
Li	L(2)	3	3	4	8	11	14	25	44	80
LOI (%)	8.13	9.83	11.3	13.2	14.5	15.2	16.5	17.4	17.7	19.9
Mg (%)	1.68	2.52	2.73	3.53	4.25	4.47	4.64	4.92	5.18	5.61
Mn	609	716	843	900	967	1010	1050	1090	1150	1420
Mo	0.13	0.21	0.24	0.37	0.85	0.94	1.1	1.2	1.4	3.3
Na (%)	0.36	0.57	0.76	0.95	1.35	1.52	1.83	2.22	2.47	3.11
Nb	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)
Nd	6	8	8	9	10	10	10	11	14	19
Ni	49	60	73	80	106	122	134	142	170	361
P (%)	0.008	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.12
Pb	6	8	9	12	19	25	29	41	53	200
S (%)	L(0.05)	0.05	0.16	0.39	1.51	1.76	1.95	2.67	4.51	5.28
Sb	1.2	2.0	2.9	3.5	4.4	5.5	7.1	11	17	29
Sc	18	21	24	26	31	32	34	36	37	40
SiO ₂ (%)	46.3	48.9	53.3	56.4	59.2	62.6	64.5	67.6	73.4	77.4
Sr	217	275	306	361	462	499	539	572	626	779
Te	0.005	0.023	0.040	0.058	0.20	0.28	0.45	0.58	0.83	1.23
Th	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)	L(4)	4	6	7
Ti (%)	0.05	0.06	0.06	0.09	0.10	0.11	0.11	0.14	0.15	0.16
Tl	0.18	0.20	0.25	0.25	0.35	0.35	0.40	0.45	0.50	0.53
V	108	143	153	171	191	200	205	227	238	248
W	3.0	4.0	4.0	4.5	5.5	6.0	7.0	8.0	8.0	9.5
Y	4	5	5	6	7	7	8	9	9	12
Yb	L(1)	L(1)	L(1)	L(1)	L(1)	L(1)	L(1)	1	1	2
Zn	38	43	53	66	83	89	103	117	147	339

Of the 300 samples, 172 were prepared and analyzed for their gross mineralogy by X-ray diffraction. The samples were first ground in an agate mortar to about minus 200 mesh (0.074 mm). Approximately equal volumes of the resulting powders were mounted on glass slides and analyzed by X-ray diffraction using a Philips XRG-3000 generator configured with a copper lamp and nickel filter and run at 40 Kv and 26 Ma. The samples were scanned over a range of 4° to 60° 2θ at a speed of 2° 2θ/min, and the responses were plotted on diffractograms. The relative abundances of 10 minerals in each sample were estimated on the resulting diffractograms using the d-spacing peak for the best line for which no interference from other mineral phases was present (Table 4) and measuring the height above background for that peak. The resulting data are tabulated in appendix 2 and summarized in table 5. For the configuration used, the lowest concentrations of a given mineral that could be detected was about 1 percent by volume.

DETERMINATION OF THRESHOLD VALUES

Chemical analyses for all 300 samples were used to determine threshold values; however, analyses for only 279 of the original 300 samples were used to construct the anomalies shown on the accompanying figures. The remaining 21 samples were from two drill holes that were well off the cross sections. As a consequence, the data for these two drill holes have not been plotted on the sections.

The rocks included in each of the three lithologic units vary in composition both laterally and vertically; consequently, the typical chemistry for each unit is not easily determined. Also, many of the samples collected for this study are rocks that have been chemically and mineralogically altered as a result of burial, regional metamorphism, hydrothermal alteration, and(or) weathering. Thus, a realistic background range for each element cannot be accurately determined. No sampling was done outside of the area of figure 2 because of the difficulty in finding outcrops that were geologically equivalent to those sampled in the drill holes.

Background ranges for the two main lithologies (Jch and Js) can be approximated from the data in tables 1 and 2. For elements that were enriched as a result of mineralization (positive geochemical anomalies), the background range for equivalent unaltered rocks is best approximated by the values between the lowest concentration reported and the 25th percentile (tables 1 and 2). For elements that were depleted as a result of mineralization or weathering (negative anomalies), the values between the 75th percentile and the highest concentration reported most closely approximate the background ranges. Most of the tuff member of the Salt Spring Slate (Jst) has been altered so that background ranges for elements in samples collected from this unit are not known.

Table 4.--d-Spacings and diffraction peaks used for semiquantitative mineralogy

<u>Mineral</u>	<u>d-Spacing (Å)</u>	<u>Diffraction peak (hkl)</u>
White mica	9.95	002
Kaolinite	7.15	001
Chlorite	4.73	003
Quartz	4.25	100
Orthoclase	3.24	002
Plagioclase	3.19	040
Calcite	3.03	104
Ankerite	2.89	104
Magnesite	2.74	104
Pyrite	1.63	311

Table 5.--Statistical summary for minerals determined by X-ray diffraction in samples of core and cuttings from three major stratigraphic units, Hodson mining district, California

[All values shown are based on peak heights on X-ray diffractograms. N=not detected at lower limit of determination shown in parentheses. Leaders (---)=value not significant]

Copper Hill Volcanics (Jch) (83 samples)

Variable	Range of values		Percent unqualified	Geometric mean	Percentiles				
	Minimum	Maximum			10	20	40	50	60
White mica	N(1)	46	80	8.3	N(1)	1	5	7	9
Kaolinite	N(1)	15	40	5.2	N(1)	N(1)	N(1)	N(1)	1
Chlorite	N(1)	42	67	8.9	N(1)	N(1)	3	5	10
Quartz	2	110	100	20	6	10	14	20	25
Orthoclase	N(1)	36	63	7.4	N(1)	N(1)	3	5	7
Plagioclase	N(1)	100	94	33	8	18	33	37	45
Calcite	N(1)	100	66	16	N(1)	N(1)	2	4	13
Ankerite	N(1)	130	78	26	N(1)	N(1)	13	17	21
Magnesite	N(1)	160	19	88	N(1)	N(1)	N(1)	N(1)	N(1)
Pyrite	N(1)	13	28	3.5	N(1)	N(1)	N(1)	N(1)	N(1)

Salt Spring Slate (Js) (64 samples)

Variable	Range of values		Percent unqualified	Geometric mean	Percentiles				
	Minimum	Maximum			10	20	40	50	60
White mica	2	38	100	16	11	13	16	18	19
Kaolinite	N(1)	25	42	7.3	N(1)	N(1)	N(1)	N(1)	2
Chlorite	N(1)	24	58	9.1	N(1)	N(1)	N(1)	2	8
Quartz	6	110	100	50	27	40	56	61	67
Orthoclase	N(1)	12	86	6.9	N(1)	5	6	7	7
Plagioclase	4	100	100	38	22	27	37	42	46
Calcite	N(1)	79	41	11	N(1)	N(1)	N(1)	N(1)	2
Ankerite	N(1)	110	89	40	N(1)	11	40	50	54
Magnesite	N(1)	67	31	19	N(1)	N(1)	N(1)	N(1)	N(1)
Pyrite	N(1)	19	66	5.0	N(1)	N(1)	2	3	4

Tuff member of Salt Spring Slate (Jst) (25 samples)

Variable	Range of values		Percent unqualified	Geometric mean	Percentiles				
	Minimum	Maximum			10	20	40	50	60
White mica	6	46	100	19	11	15	19	20	21
Kaolinite	N(1)	5	8	---	N(1)	N(1)	N(1)	N(1)	N(1)
Chlorite	N(1)	21	32	5.9	N(1)	N(1)	N(1)	N(1)	N(1)
Quartz	18	100	100	50	30	32	45	50	59
Orthoclase	N(1)	9	96	5.1	4	4	5	5	6
Plagioclase	4	100	100	29	14	17	21	29	33
Calcite	N(1)	62	20	19	N(1)	N(1)	N(1)	N(1)	N(1)
Ankerite	N(1)	125	84	78	N(1)	15	78	100	100
Magnesite	N(1)	47	28	9.7	N(1)	N(1)	N(1)	N(1)	N(1)
Pyrite	N(1)	14	36	5.0	N(1)	N(1)	N(1)	N(1)	N(1)

Table 5.--Continued

[All values are based on peak heights on X-ray diffractograms. N=not detected at lower limit of determination shown in parentheses]

Copper Hill Volcanics (Jch)

<u>Variable</u>	<u>Percentiles</u>	
	<u>80</u>	<u>90</u>
White mica	15	21
Kaolinite	5	10
Chlorite	15	21
Quartz	35	88
Orthoclase	10	12
Plagioclase	56	69
Calcite	47	71
Ankerite	69	110
Magnesite	N(1)	91
Pyrite	3	4

Salt Spring Slate (Js)

<u>Variable</u>	<u>Percentiles</u>	
	<u>80</u>	<u>90</u>
White mica	22	27
Kaolinite	10	10
Chlorite	16	19
Quartz	73	80
Orthoclase	8	9
Plagioclase	55	65
Calcite	10	23
Ankerite	74	88
Magnesite	14	29
Pyrite	7	10

Tuff member of Salt Spring Slate (Jst)

<u>Variable</u>	<u>Percentiles</u>	
	<u>80</u>	<u>90</u>
White mica	27	34
Kaolinite	N(1)	N(1)
Chlorite	4	13
Quartz	84	97
Orthoclase	7	7
Plagioclase	63	83
Calcite	5	13
Ankerite	110	115
Magnesite	6	12
Pyrite	4	9

The threshold values for the chemical data were determined by first studying the dispersion patterns for gold and other closely associated elements, including silver, arsenic, sulfur, antimony, thallium, and tungsten. This initial examination revealed that approximately 50 percent of the samples in the major (Jch and Js) units and 80 percent of the samples in the tuff unit (Jst) were anomalous for these elements as a result of gold mineralization. Threshold values for all other elements represented by positive anomalies were therefore contoured using values for the 50th or 20th percentiles, respectively (tables 1 to 3). Conversely, elements represented by negative anomalies were contoured using values for the 50th or 80th percentiles, respectively. Where geologically warranted, or where the range of reported values for a given element was limited, minor adjustments were made for the threshold value for a few elements. Our evaluation of the plots revealed that slight variations in the threshold value do not materially affect the overall anomaly patterns. All values have been rounded to two or less significant digits for plotting.

The threshold values for the mineral anomalies plotted for this report were determined using these same criteria. In several cases, the thresholds were modified slightly because only a limited range of values was present. The threshold values used for contouring each anomaly are shown on each cross section.

DISTRIBUTIONS OF ANOMALIES

The cross sections that follow (figs. 6-57) illustrate the distributions of anomalies for 42 chemical and 10 mineral variables. There is no unique way to draw the contours for most of the variables. Emphasis has been given to showing the most significant areas of enrichment or depletion (or both) for each variable. Where considered geologically reasonable, the boundaries of anomalies have been extended to geologic contacts or faults. Note that in some cases the anomalies are shown to extend beyond the depths of drilling or into areas where analytical information is inadequate. In such cases a question mark is shown and the extent of these anomalies should be considered speculative.

ACKNOWLEDGMENTS

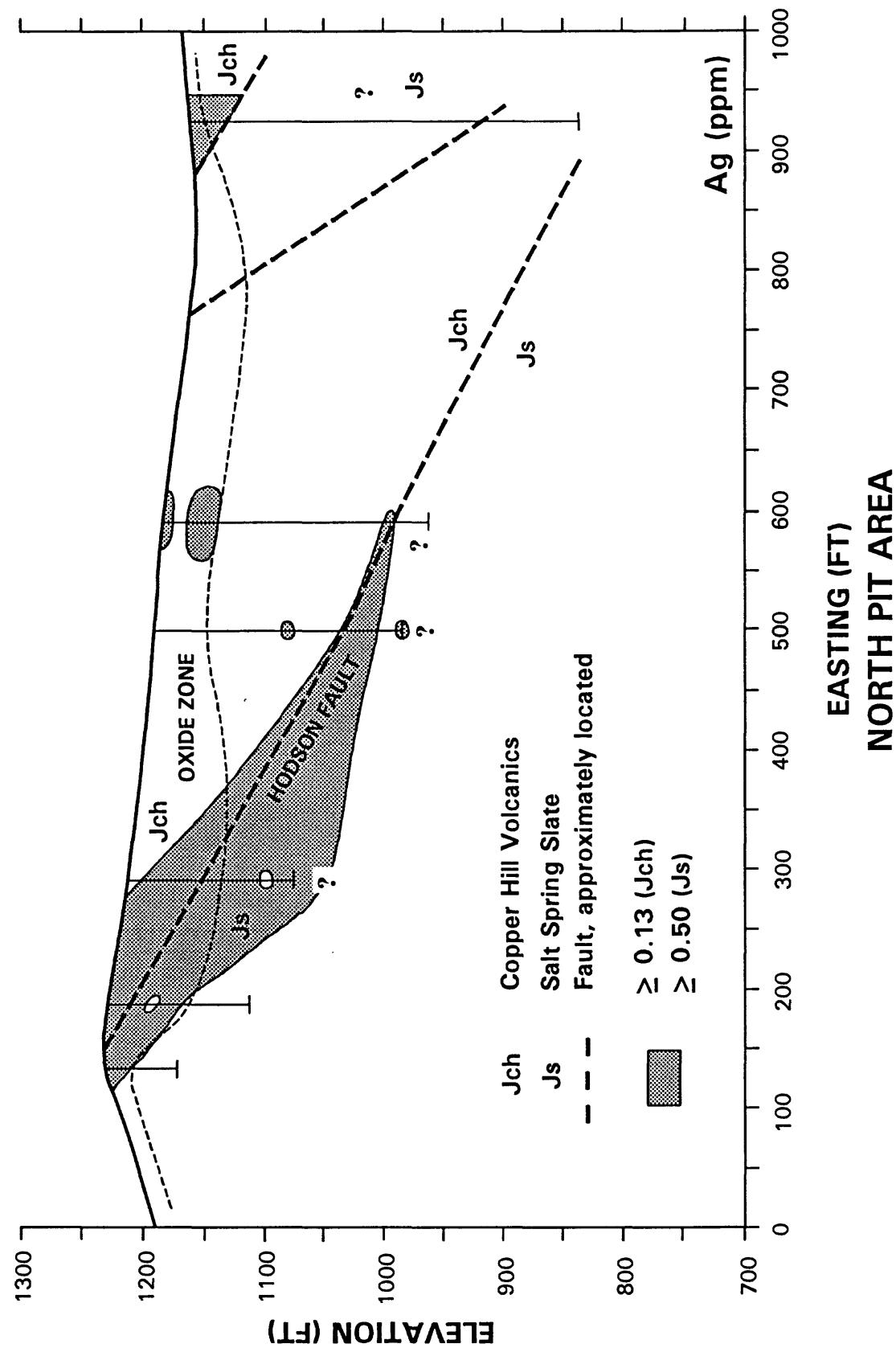
We thank P.H. Briggs, P.L. Hageman, R.H. Hill, J.M. Motoooka, T.A. Roemer, B.H. Roushey, Will Sadler, D.F. Siems, and J.E. Taggart for the analytical determinations. We are indebted to FMC Gold Company (formerly Meridian Gold Company) for letting us collect samples of drill core and cuttings from the three deposits. T.O. Kuhl and Mike Lechner, formerly of that company, were particularly helpful in showing one of us (MAC) around the property and in sorting out some of the geological complexities of the deposits.

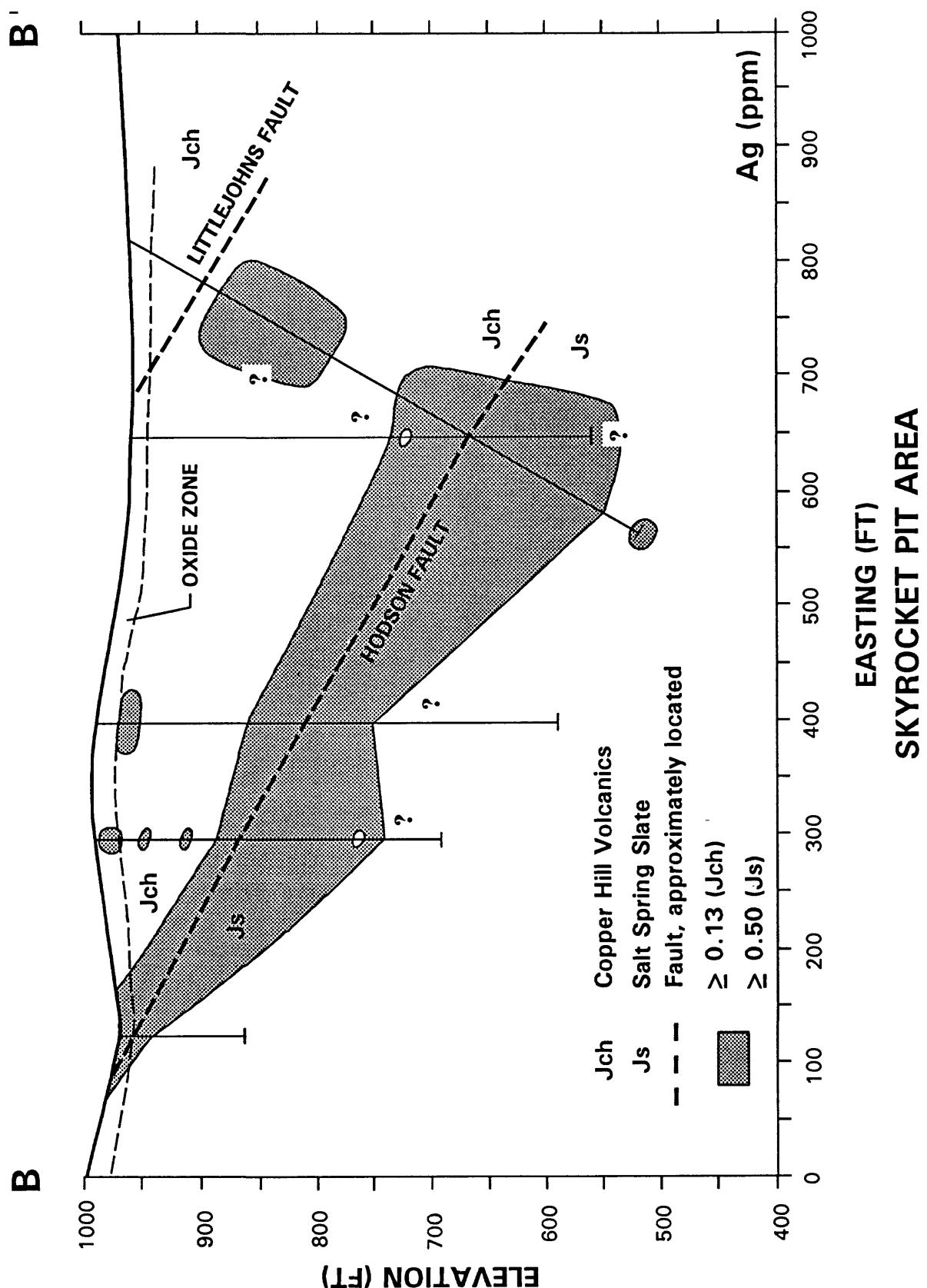
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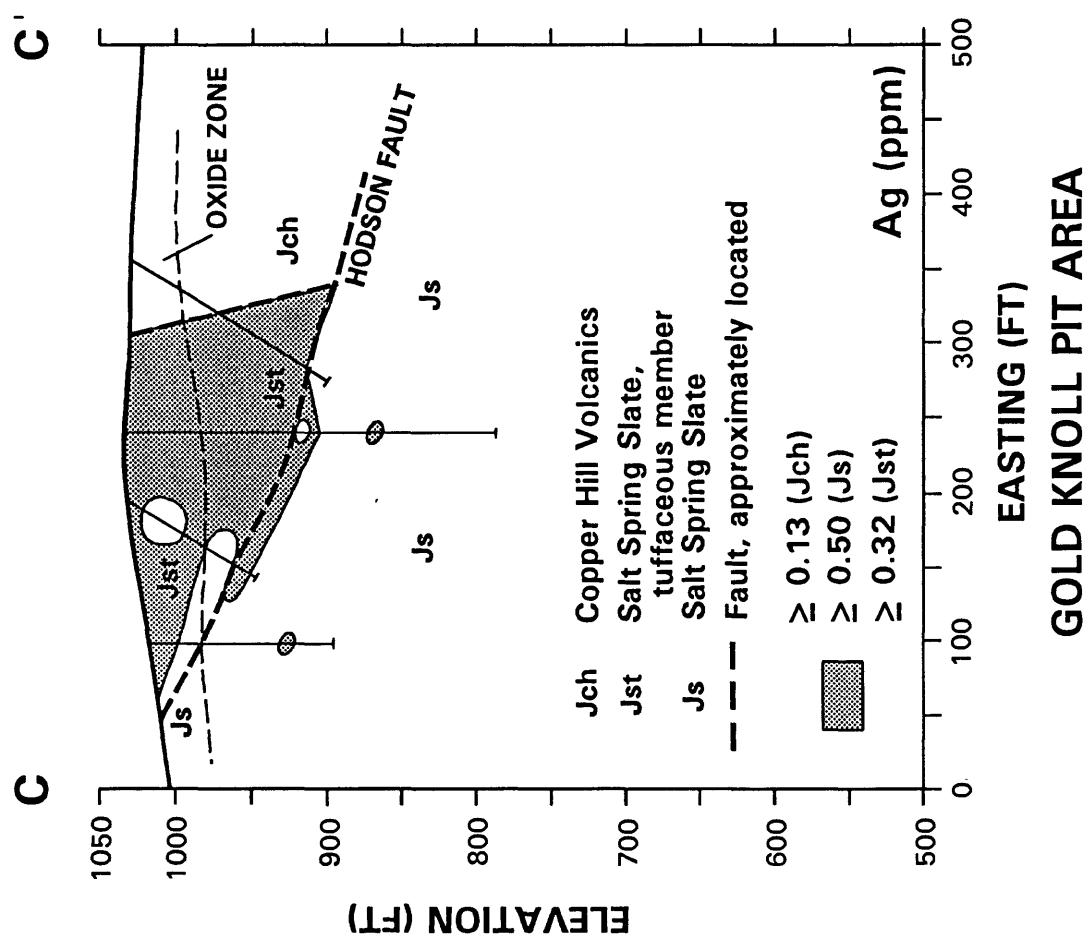
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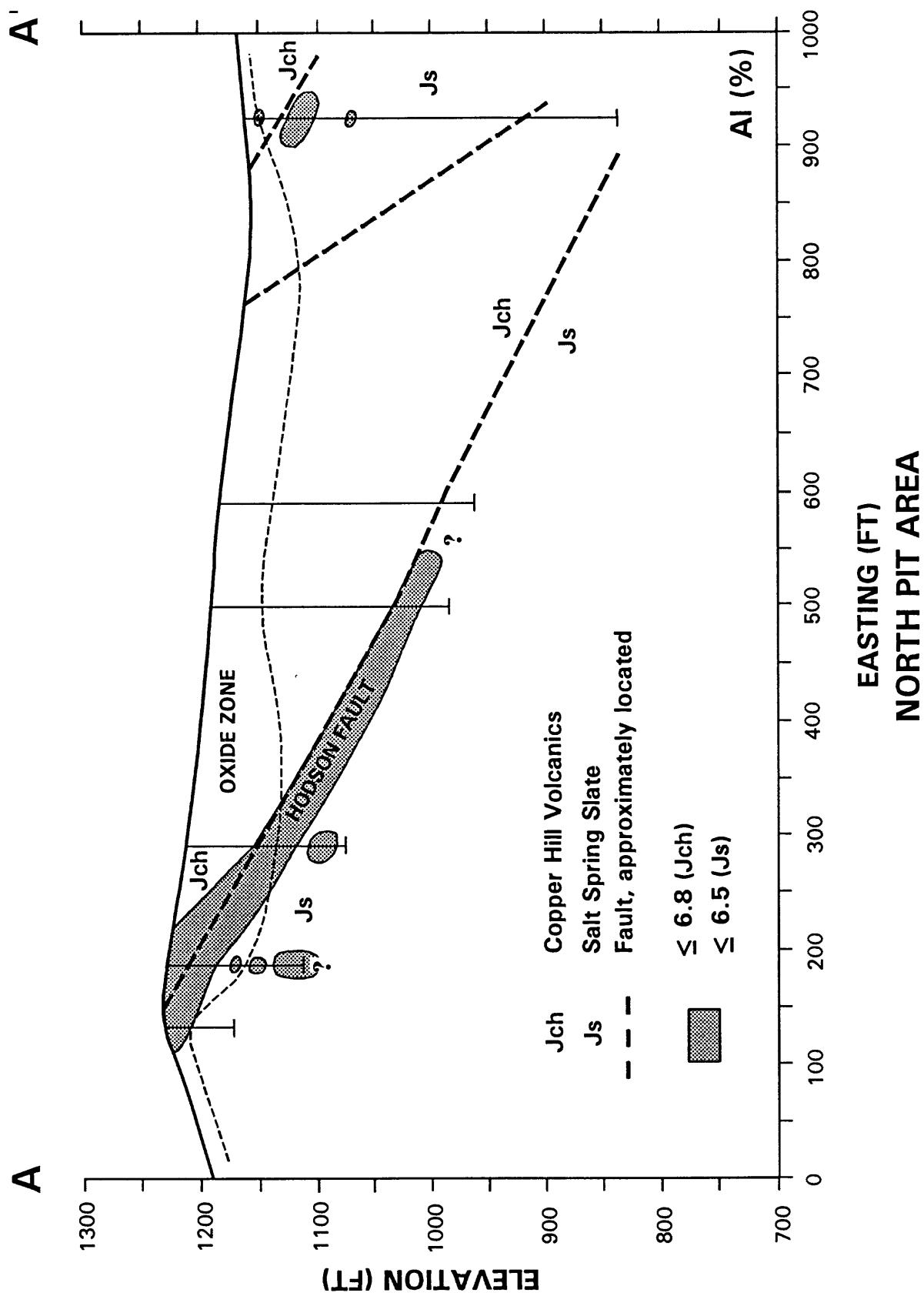
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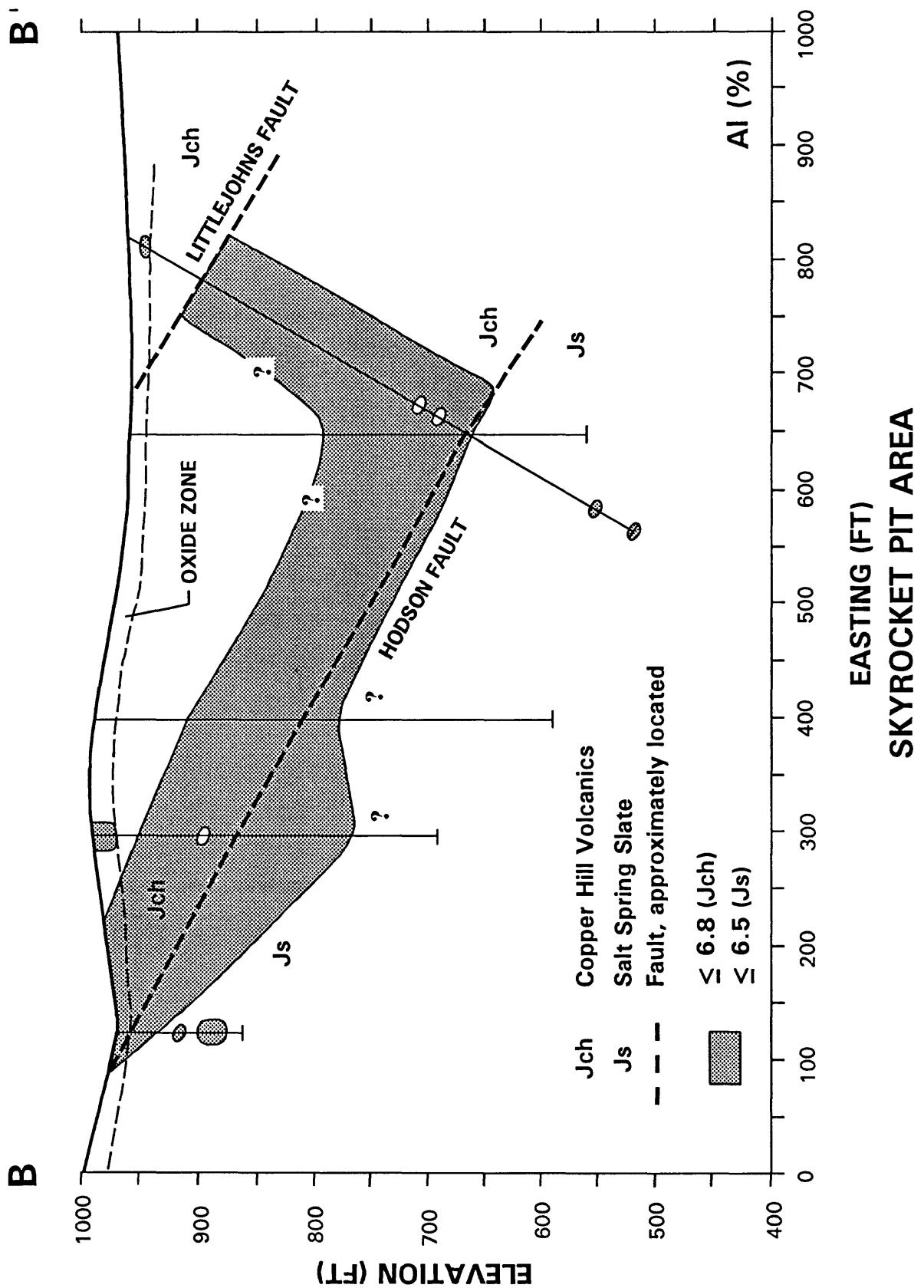
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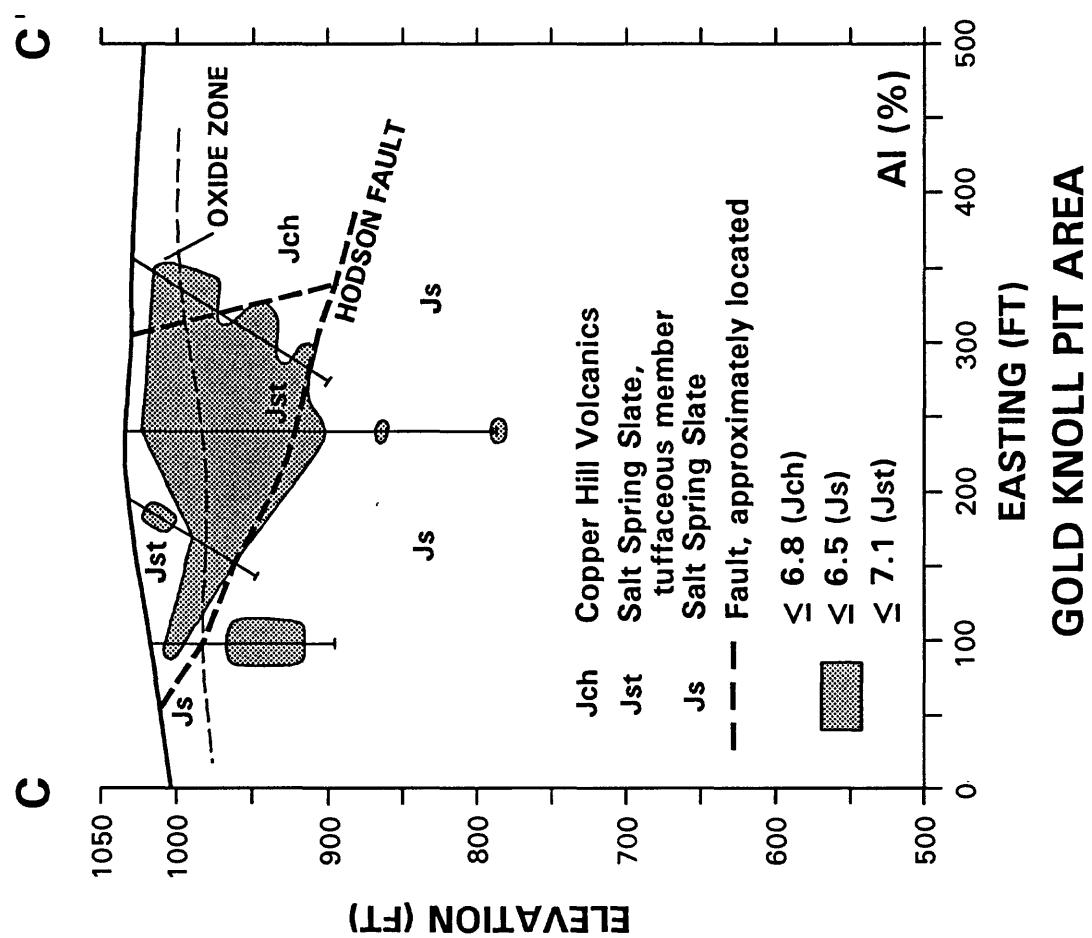
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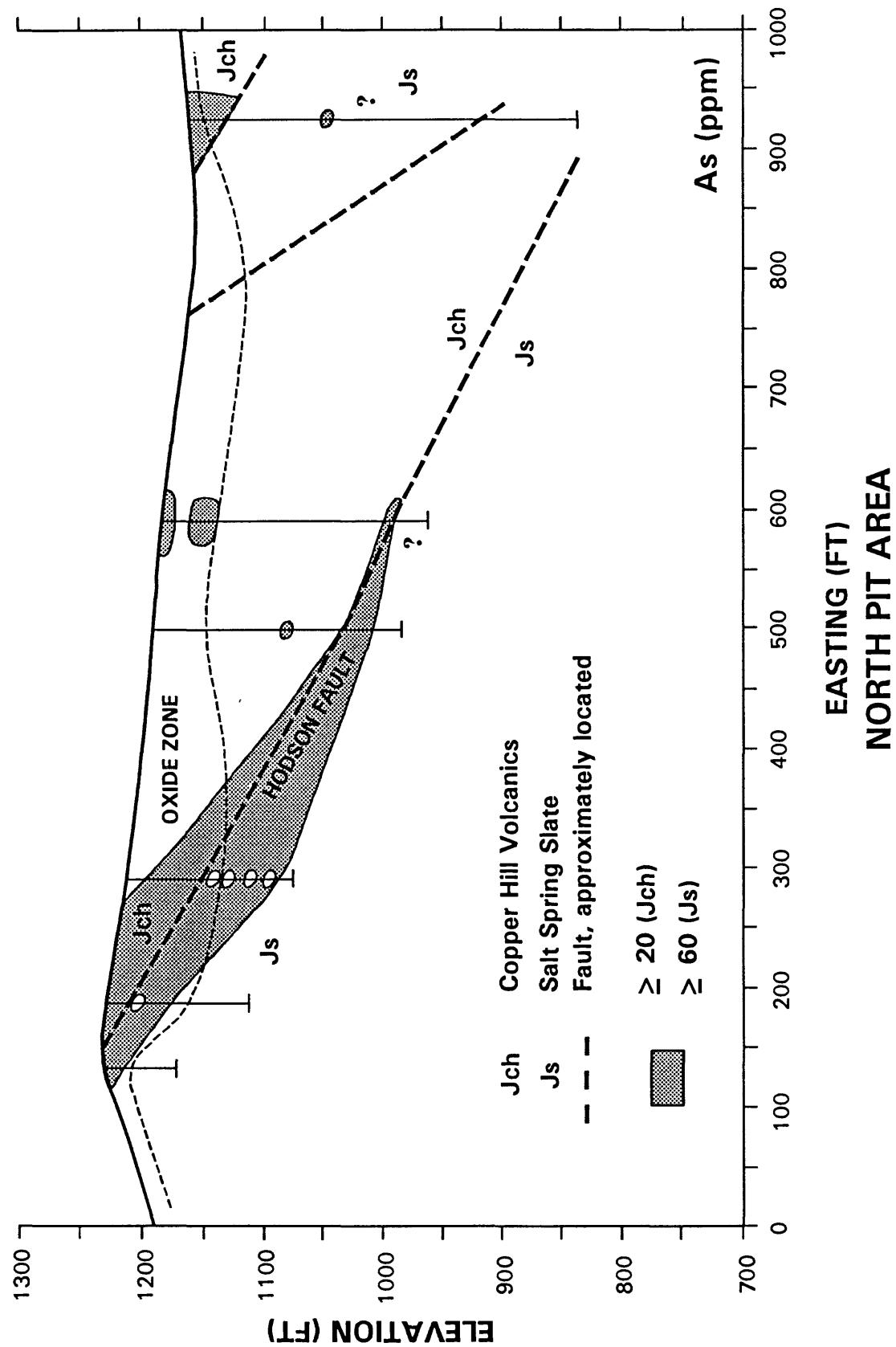




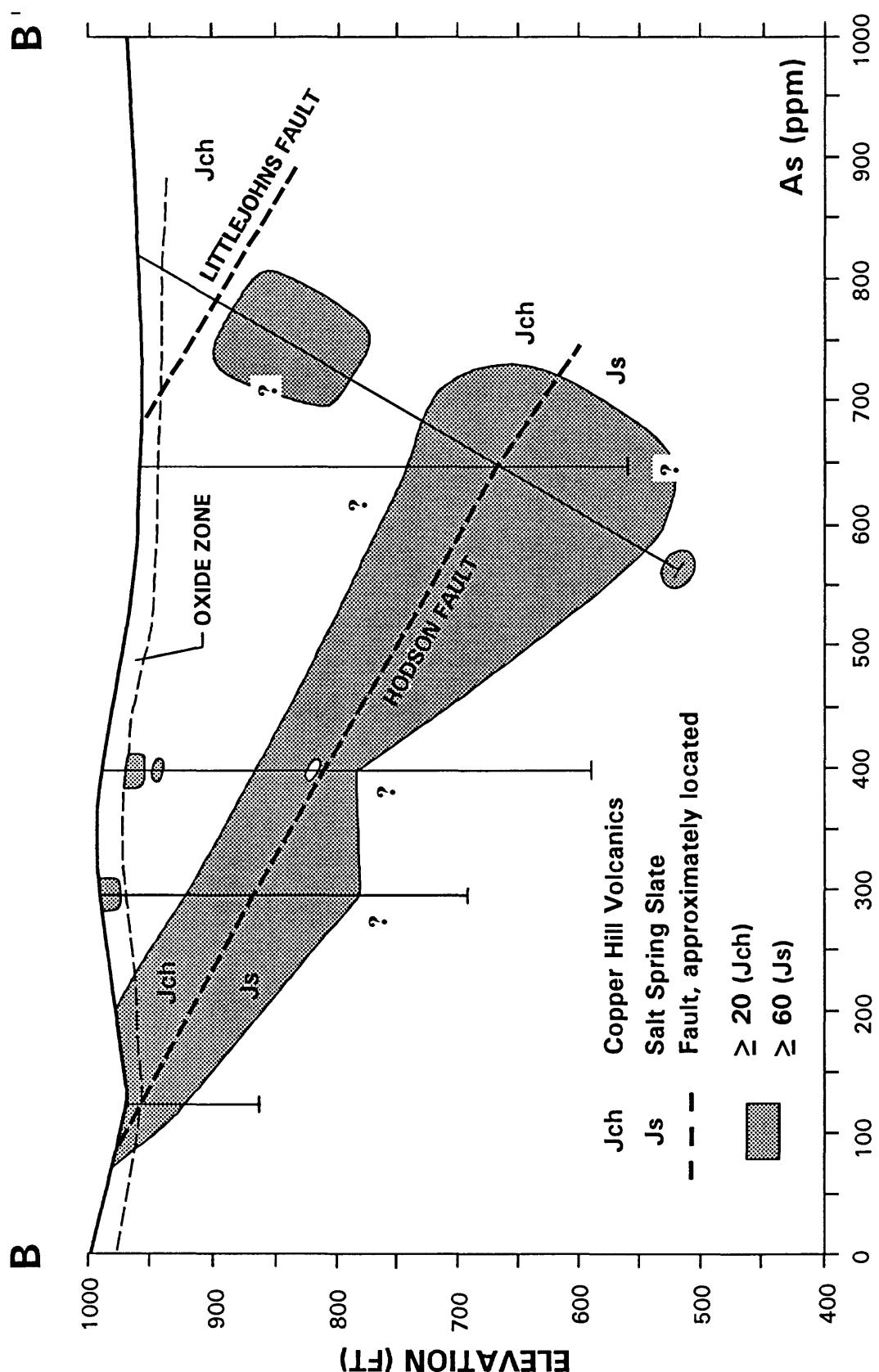


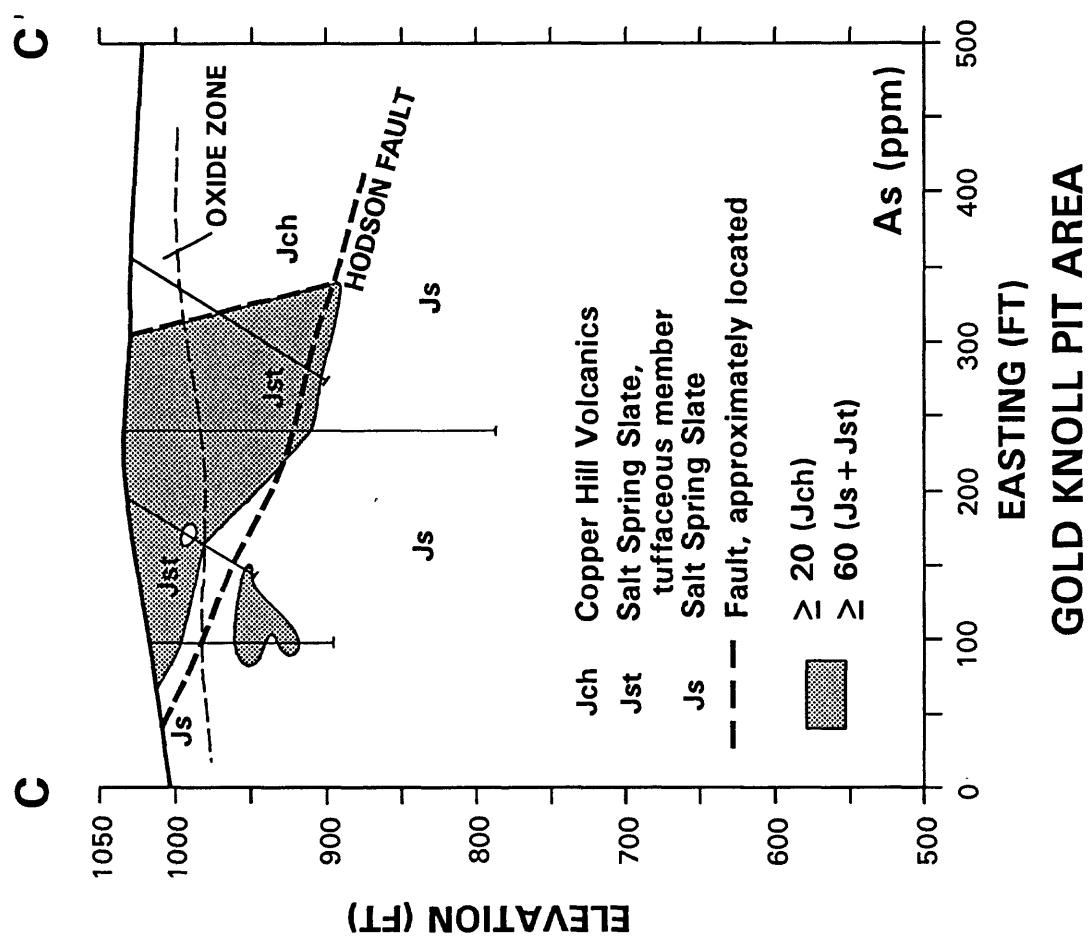


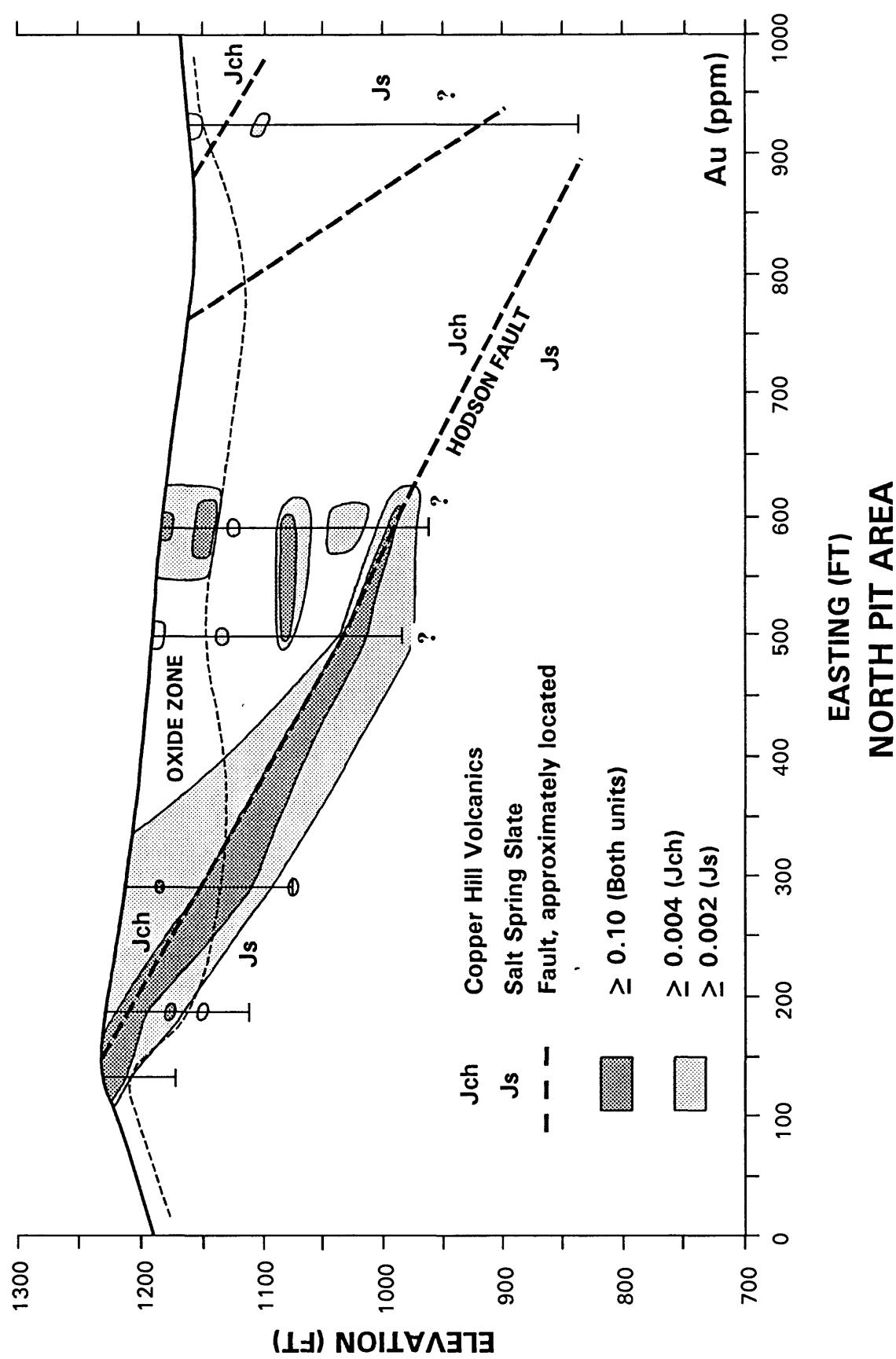


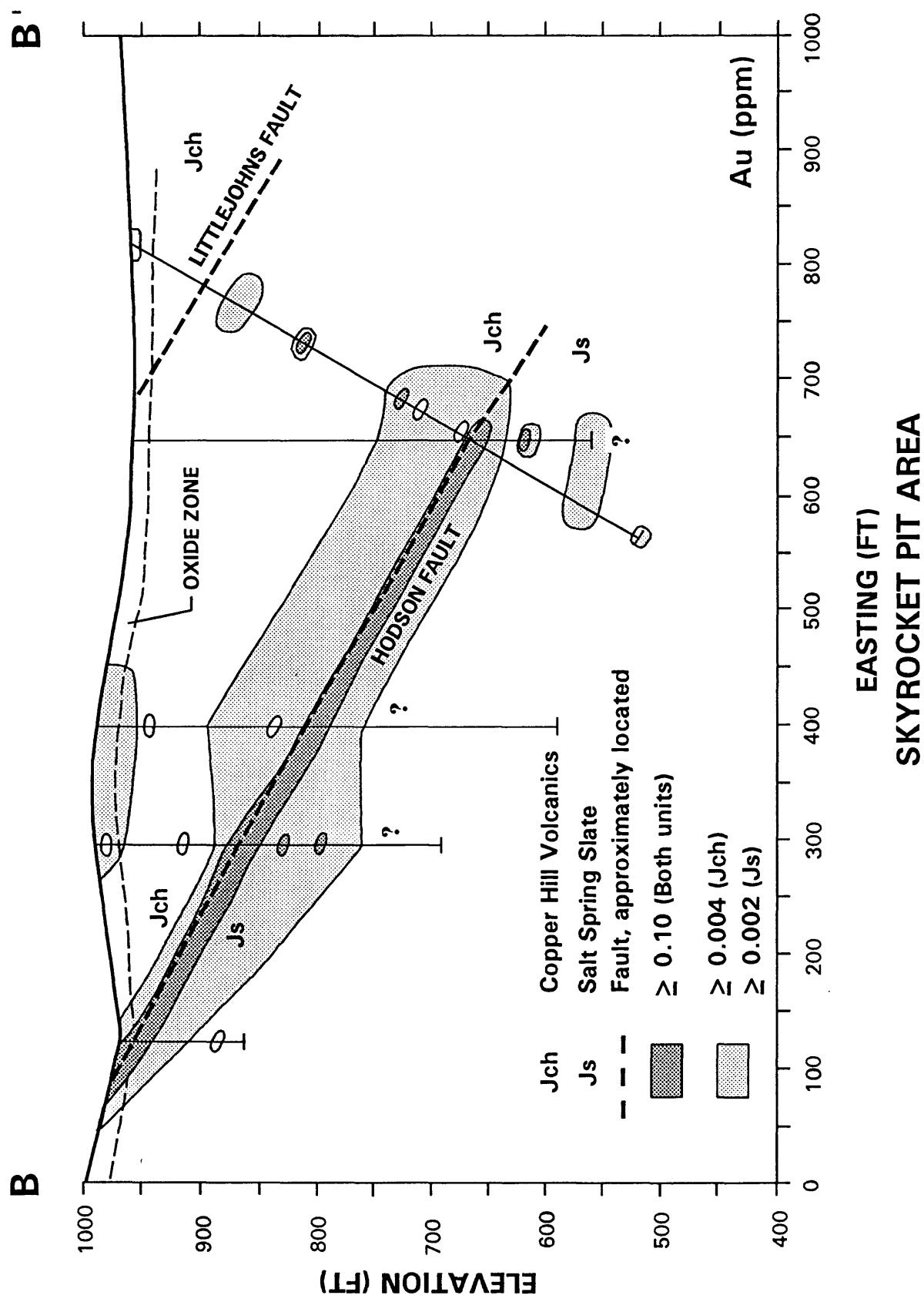
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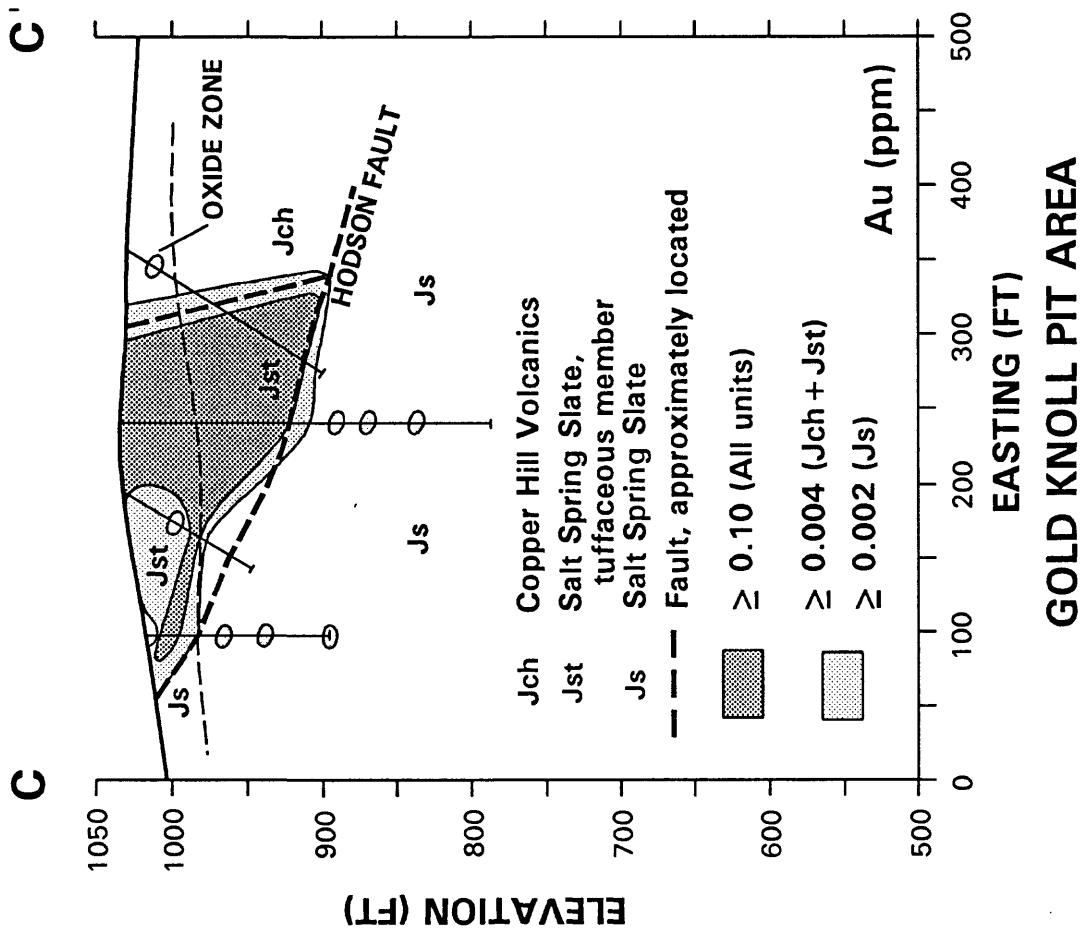
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SKYROCKET PIT AREA





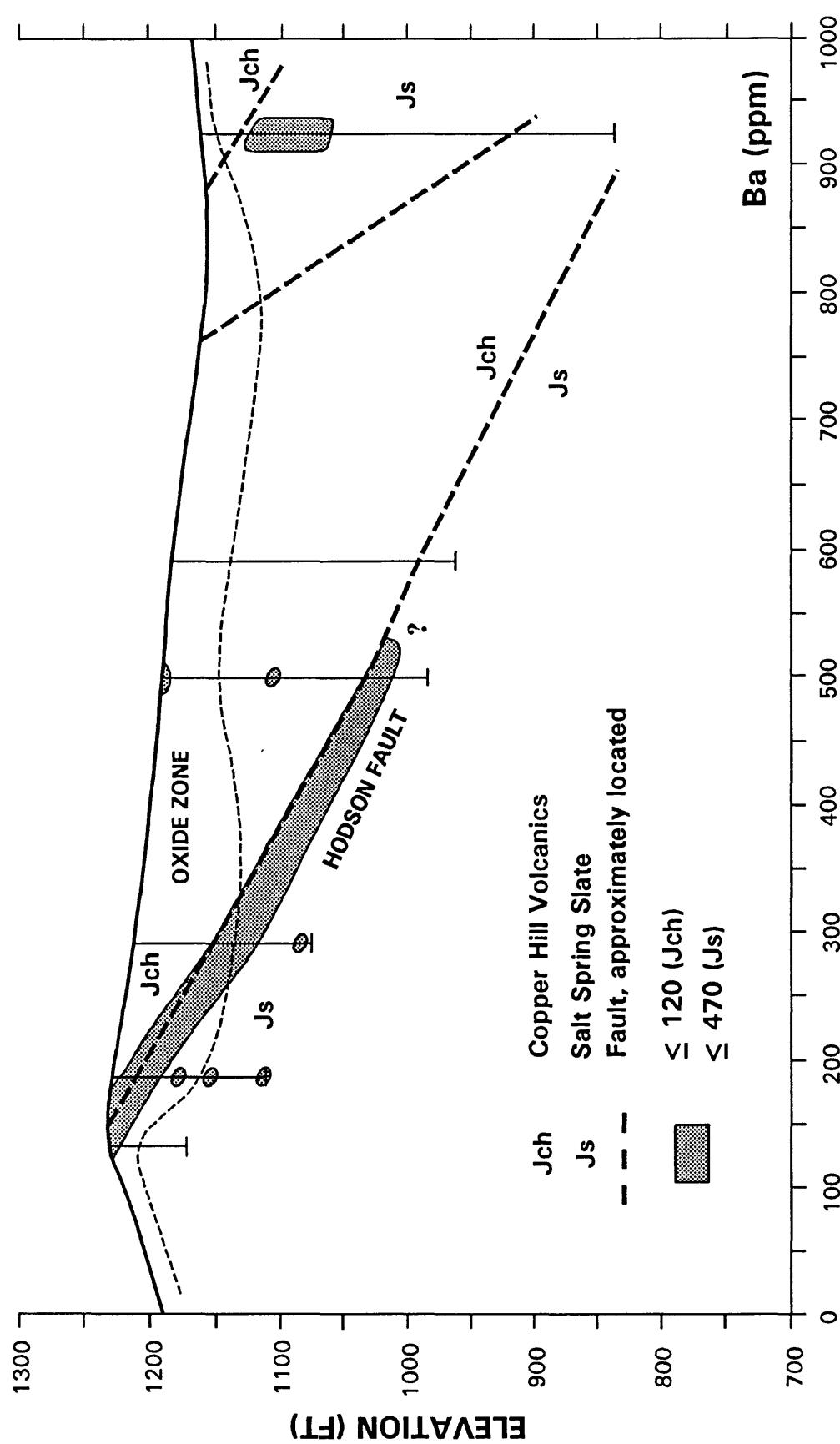
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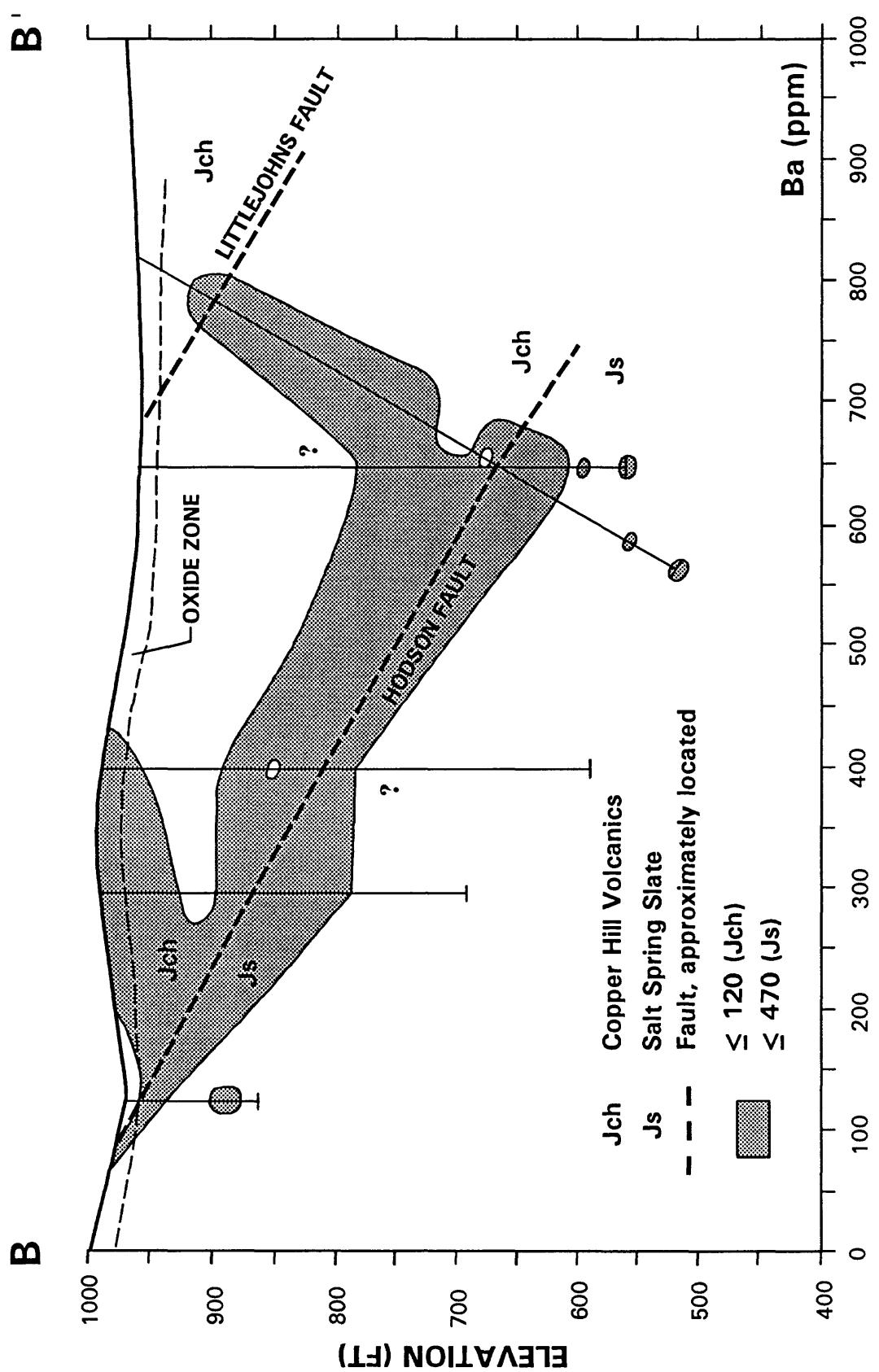
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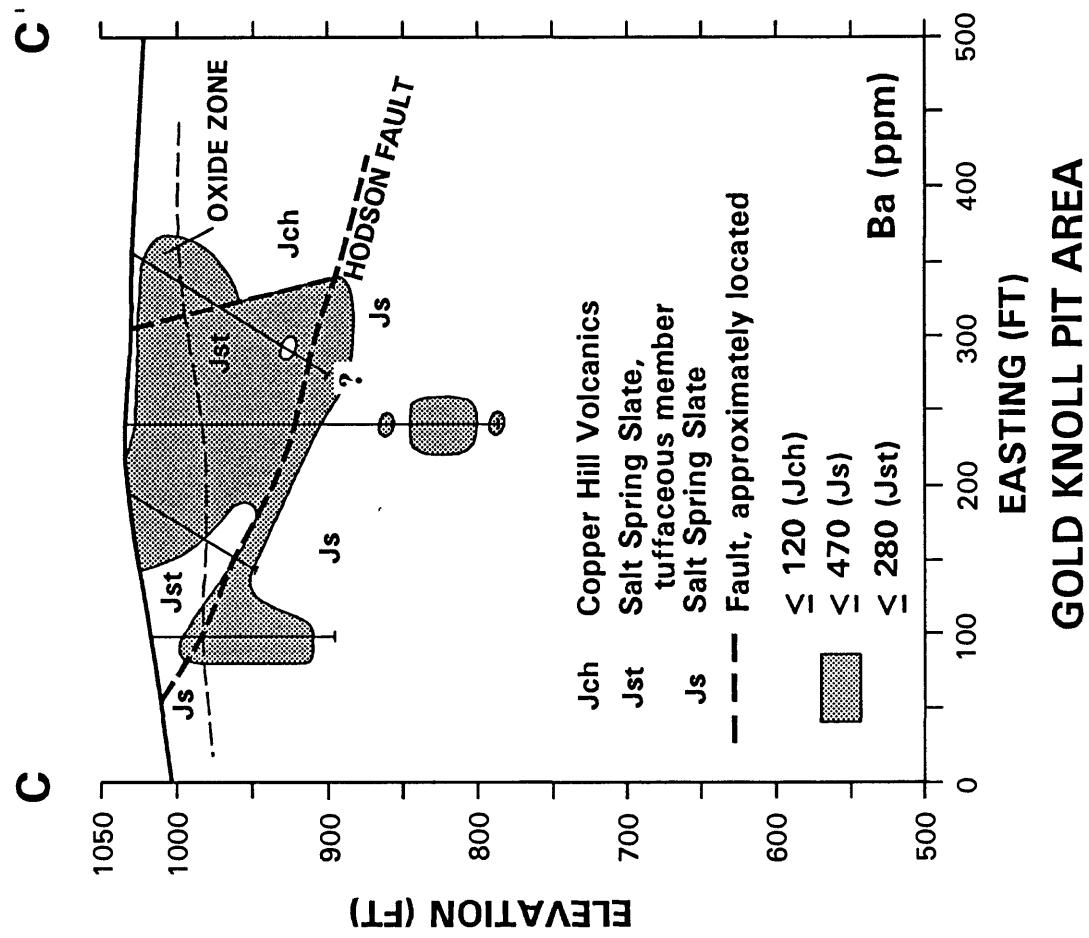
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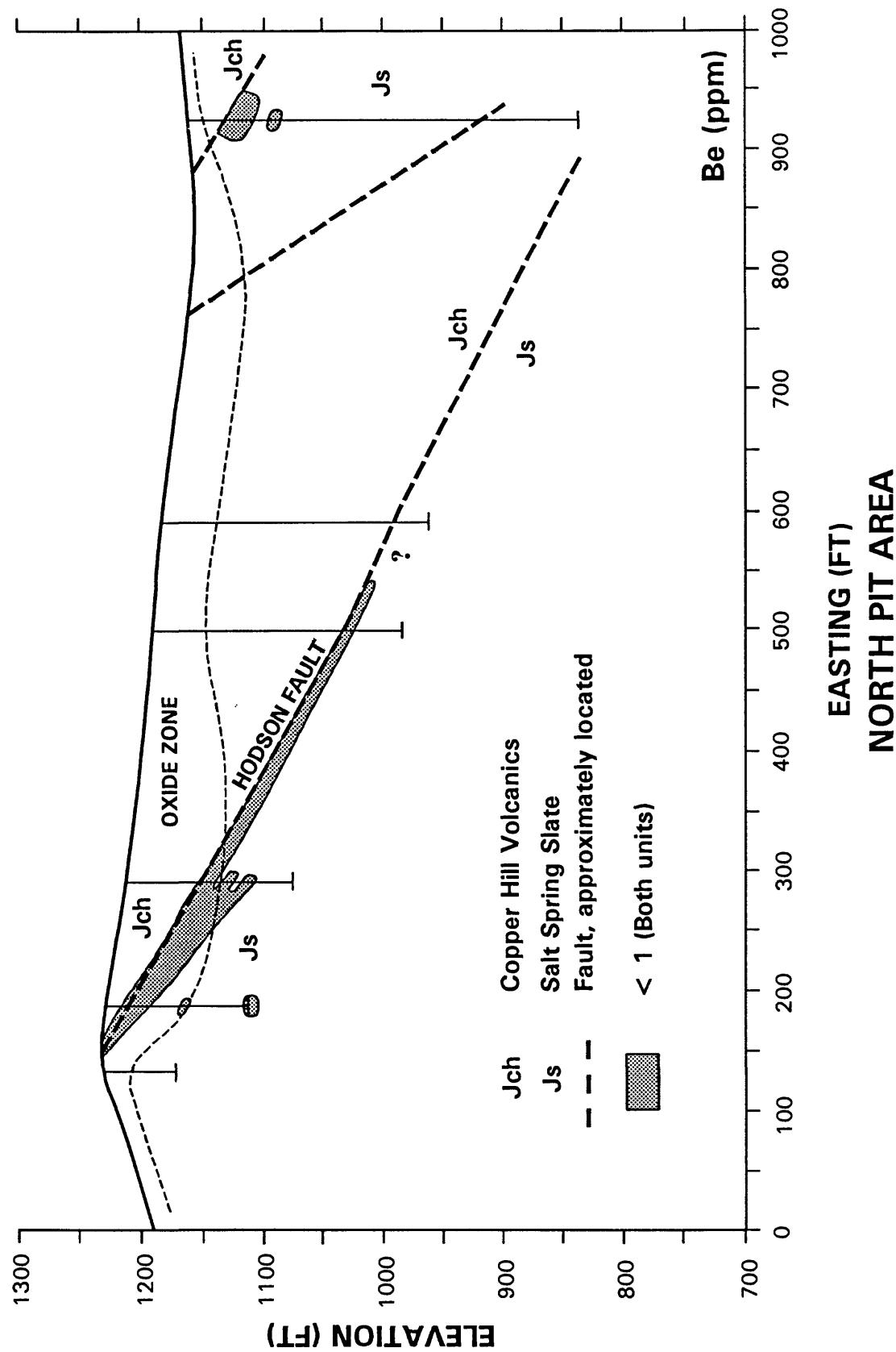
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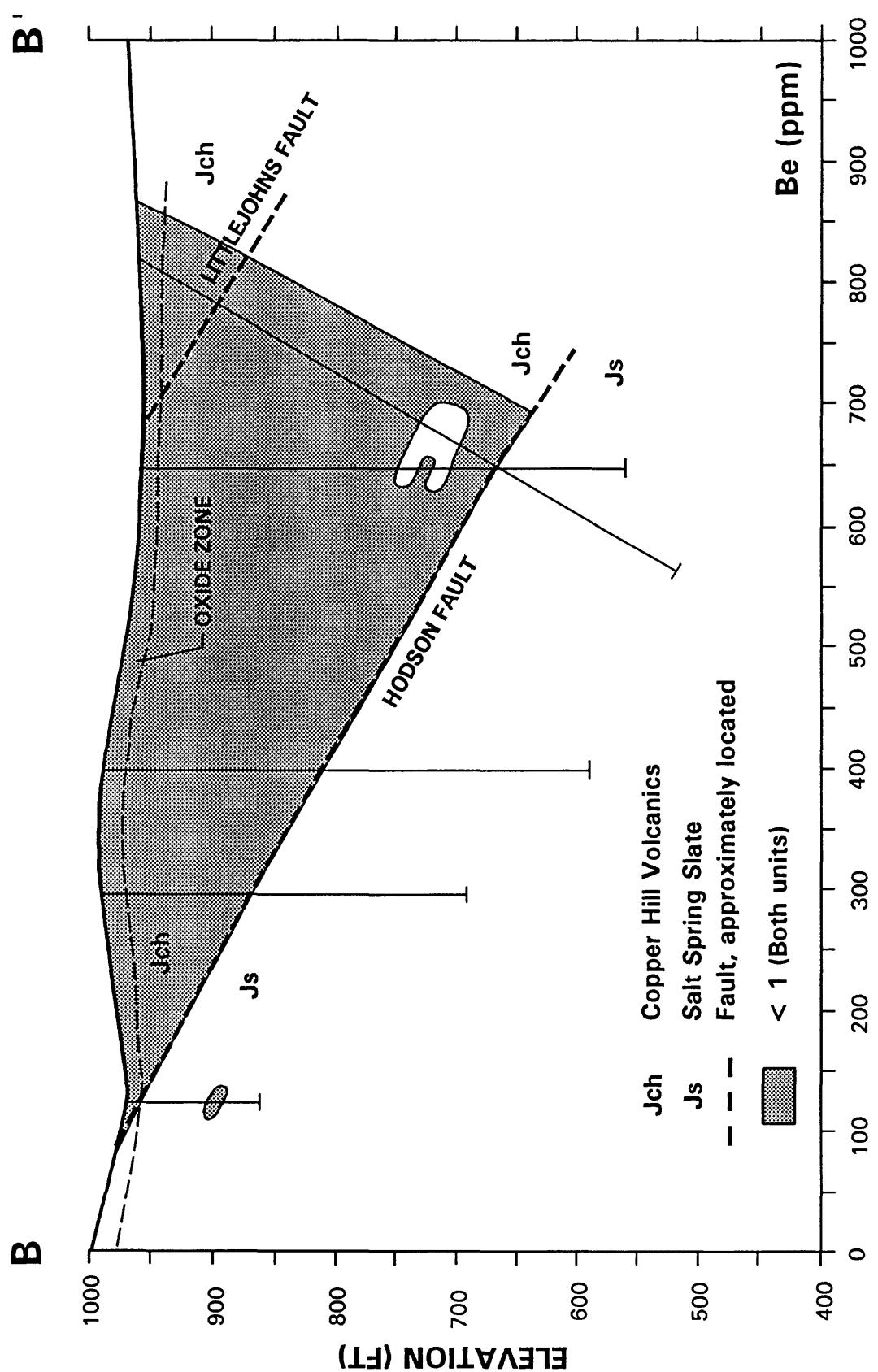


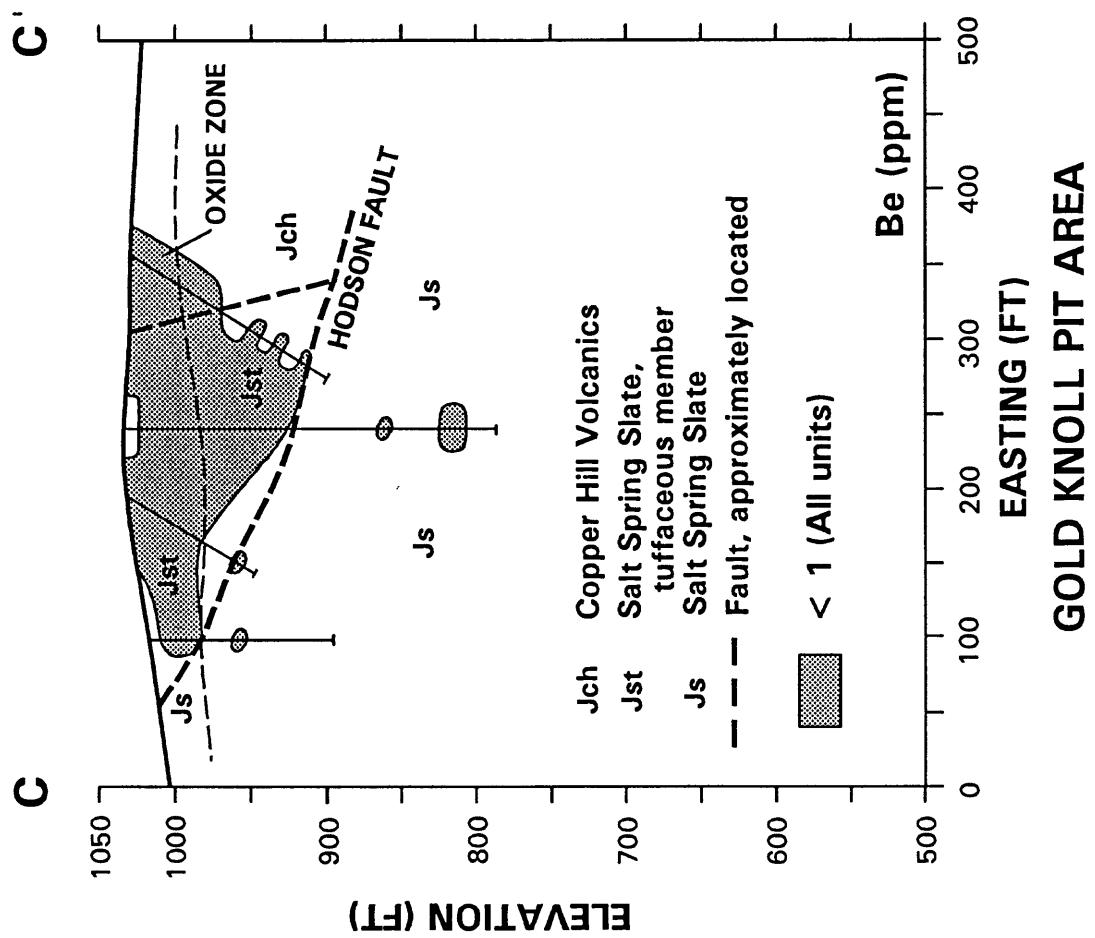
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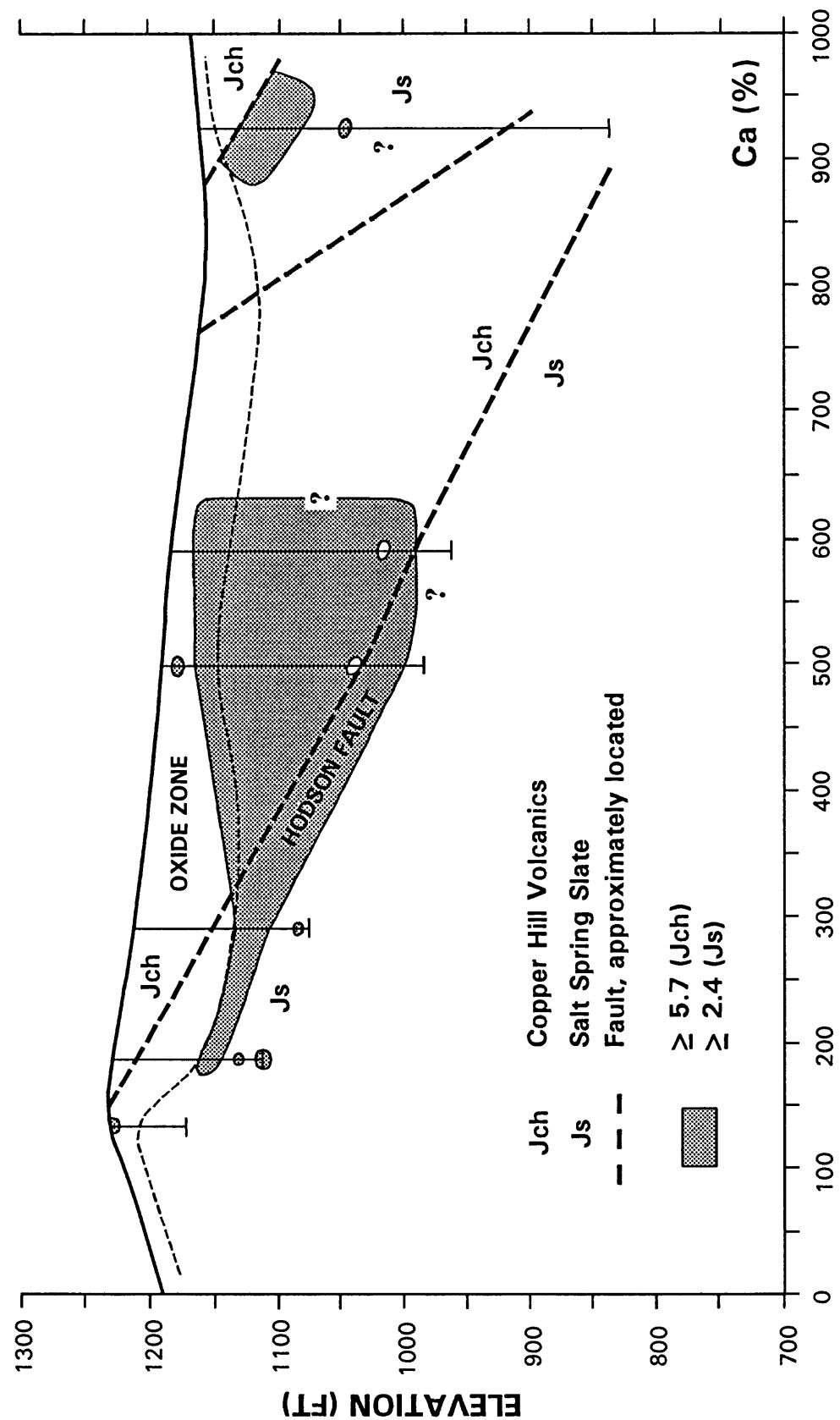
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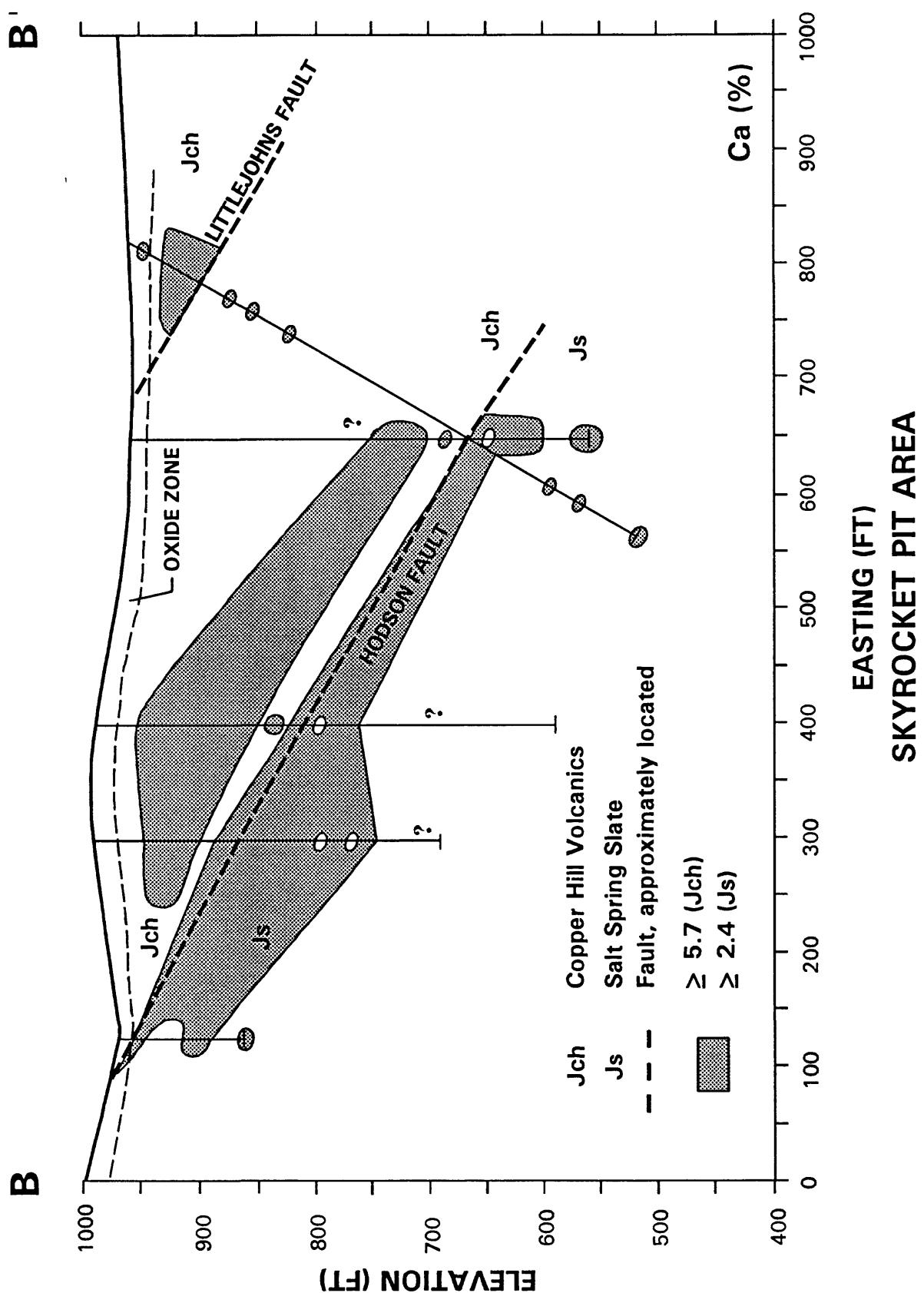


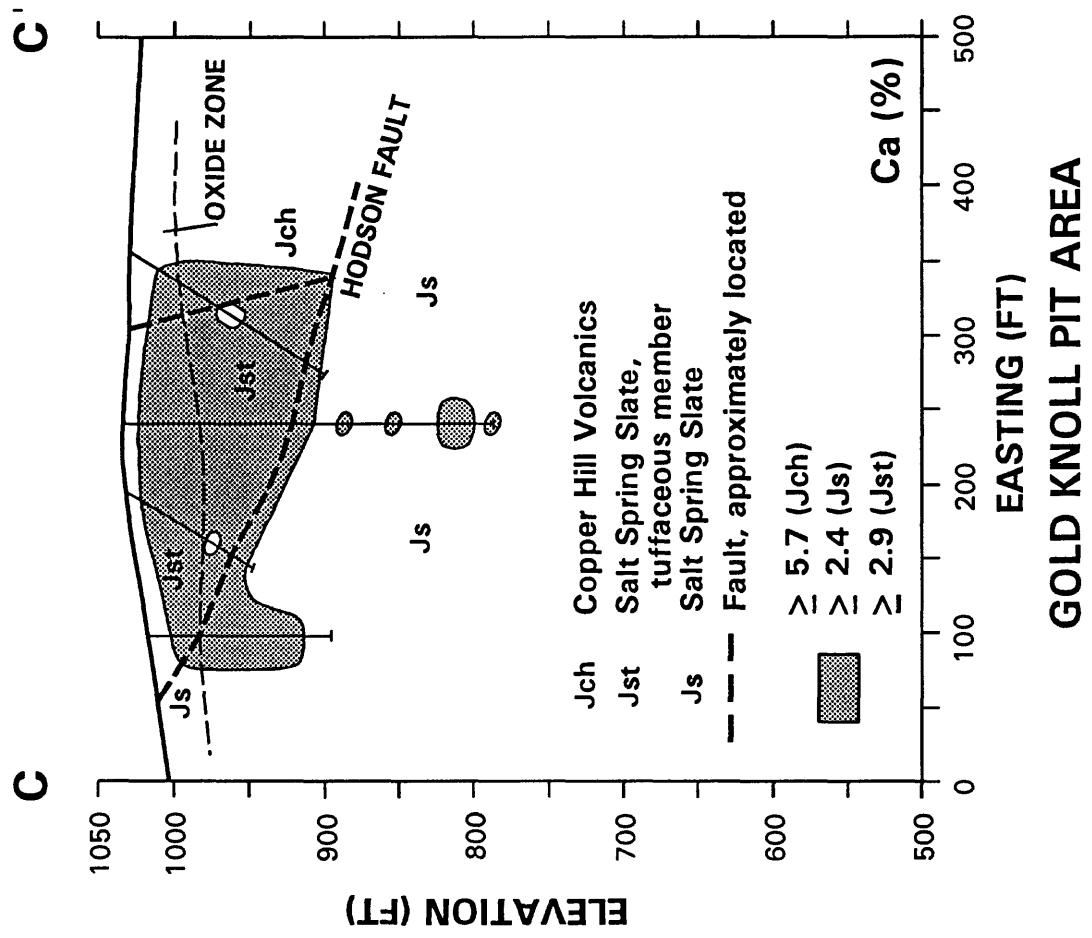
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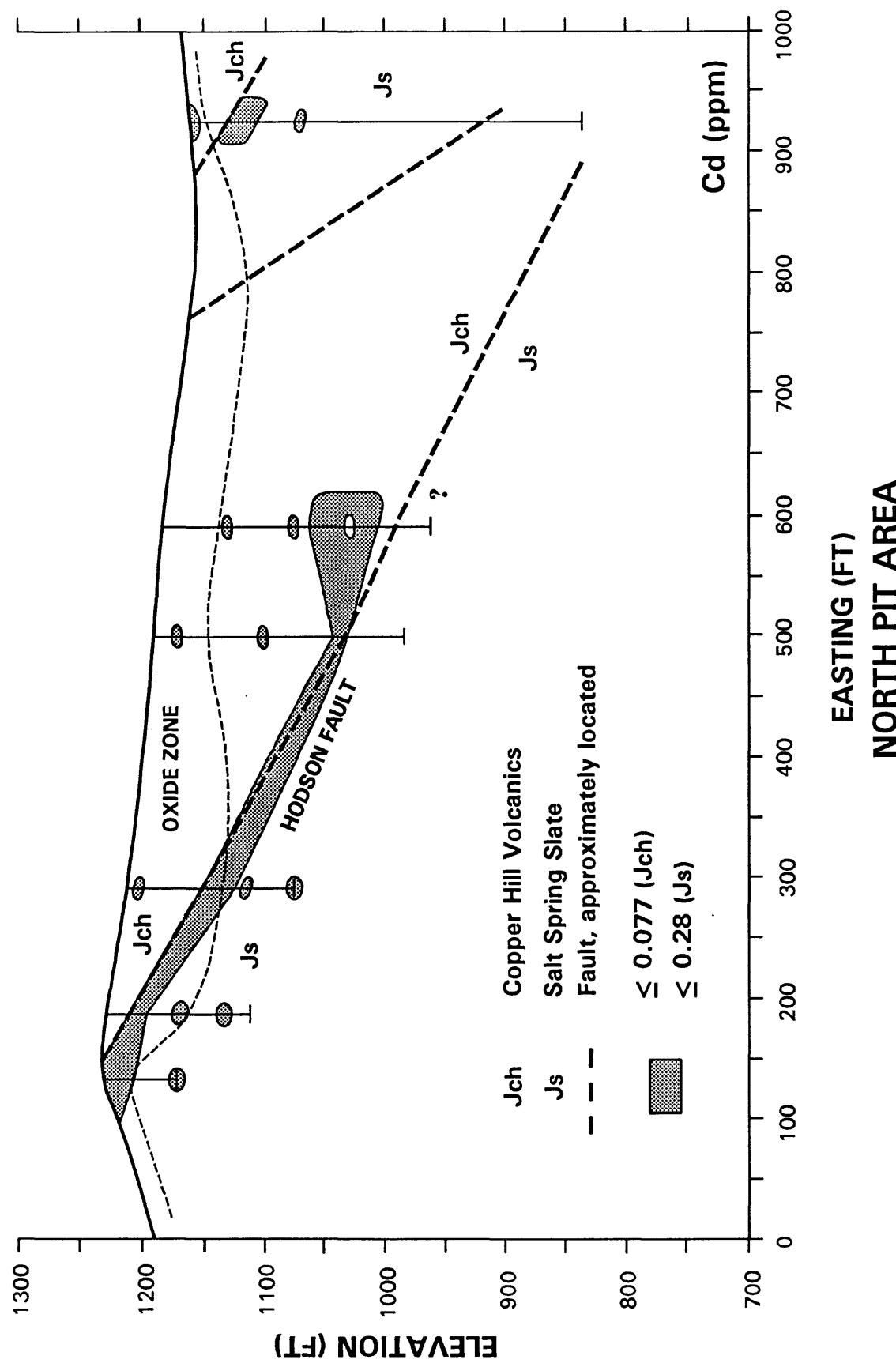


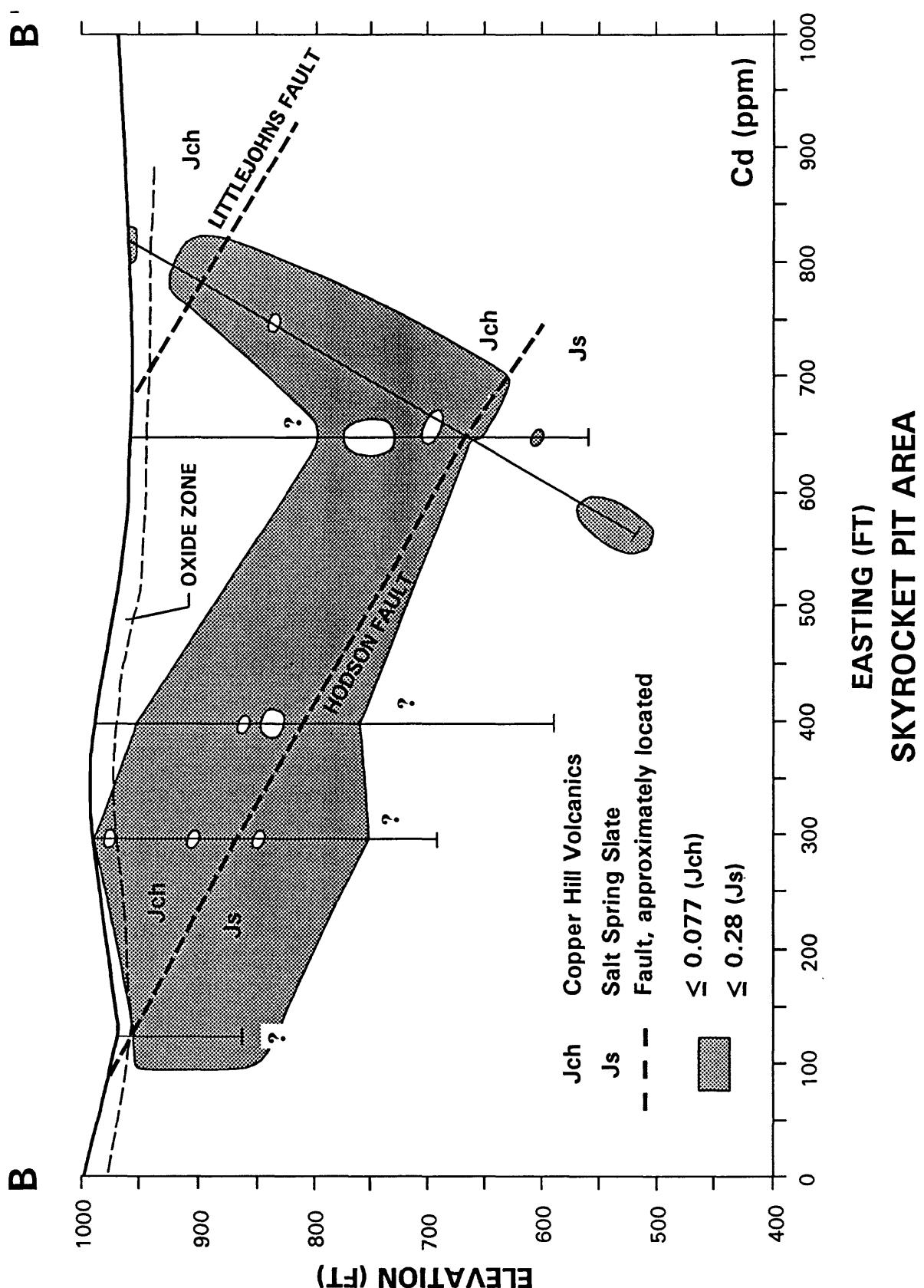


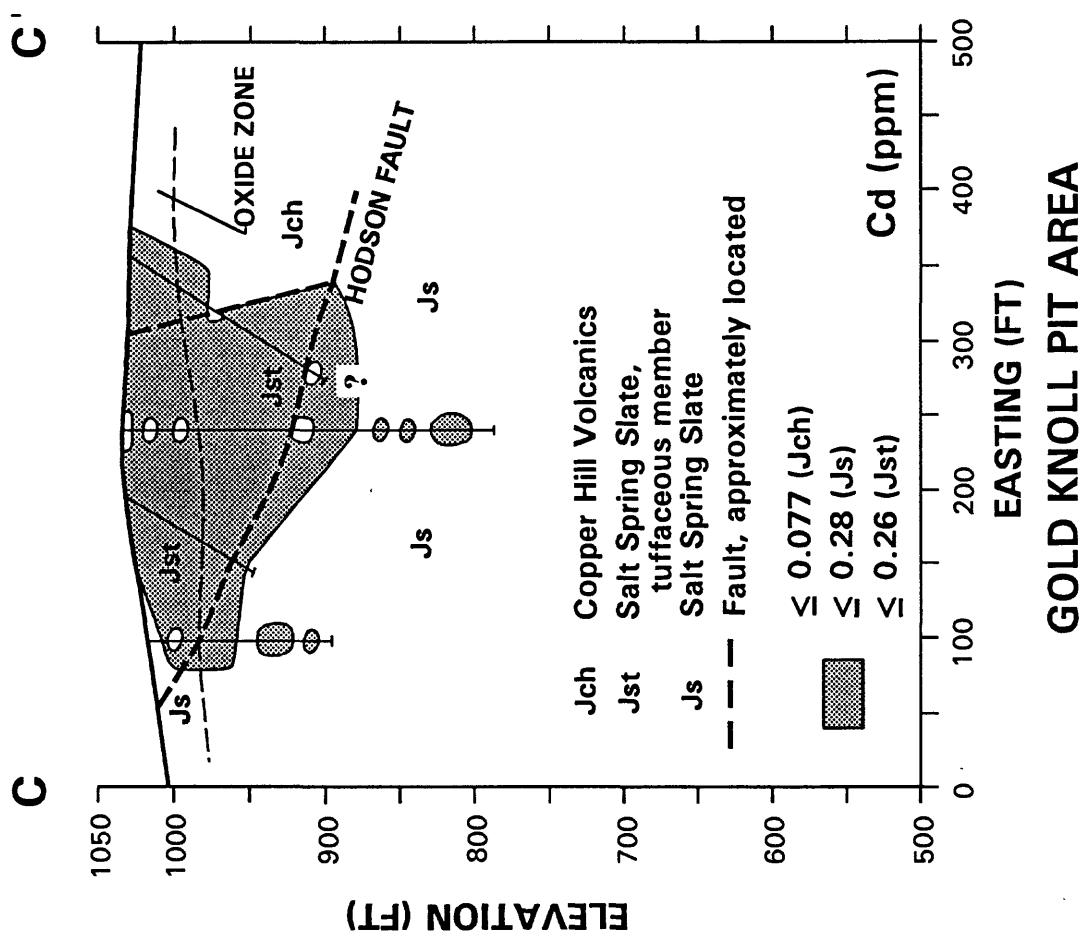
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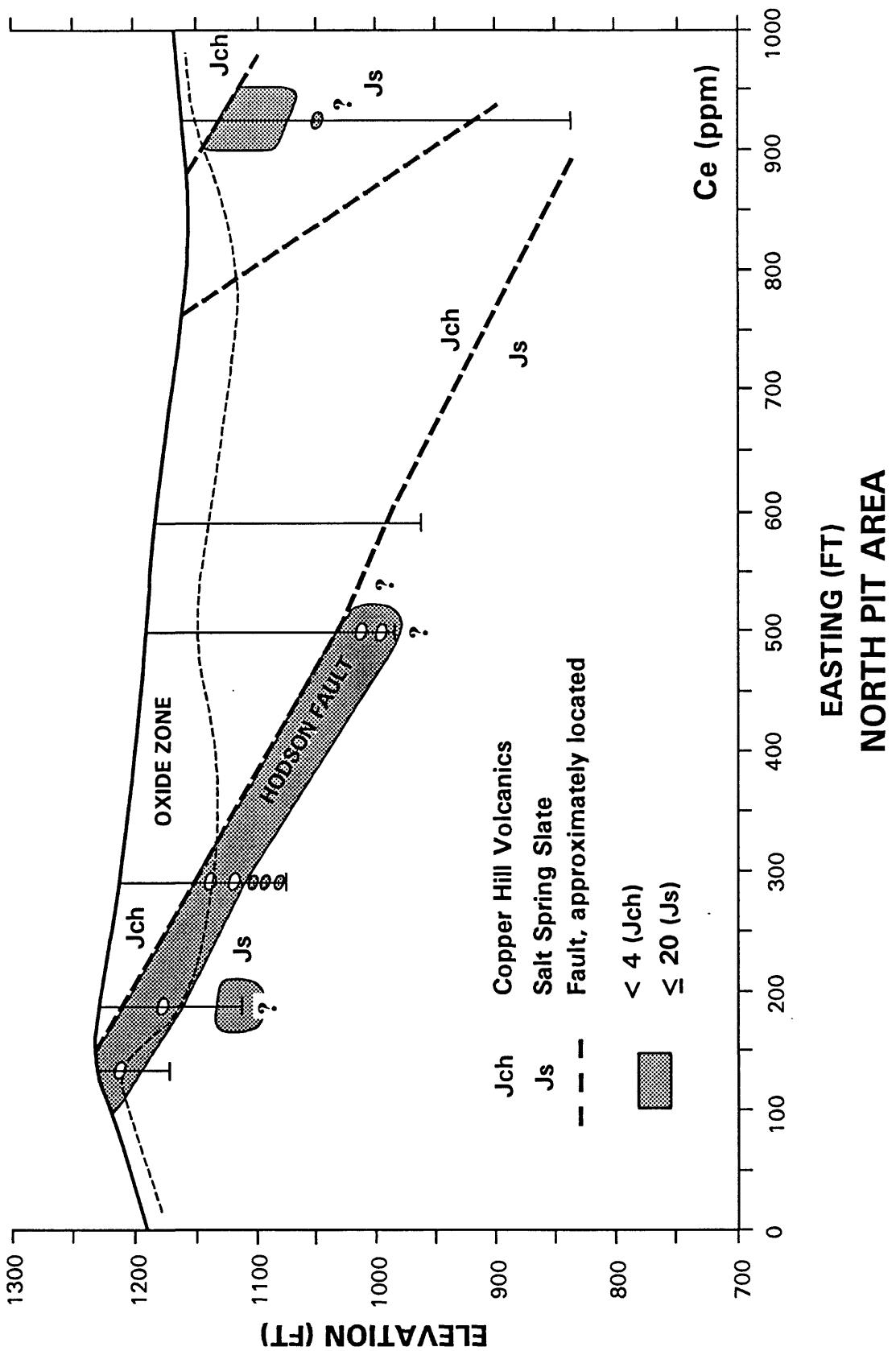


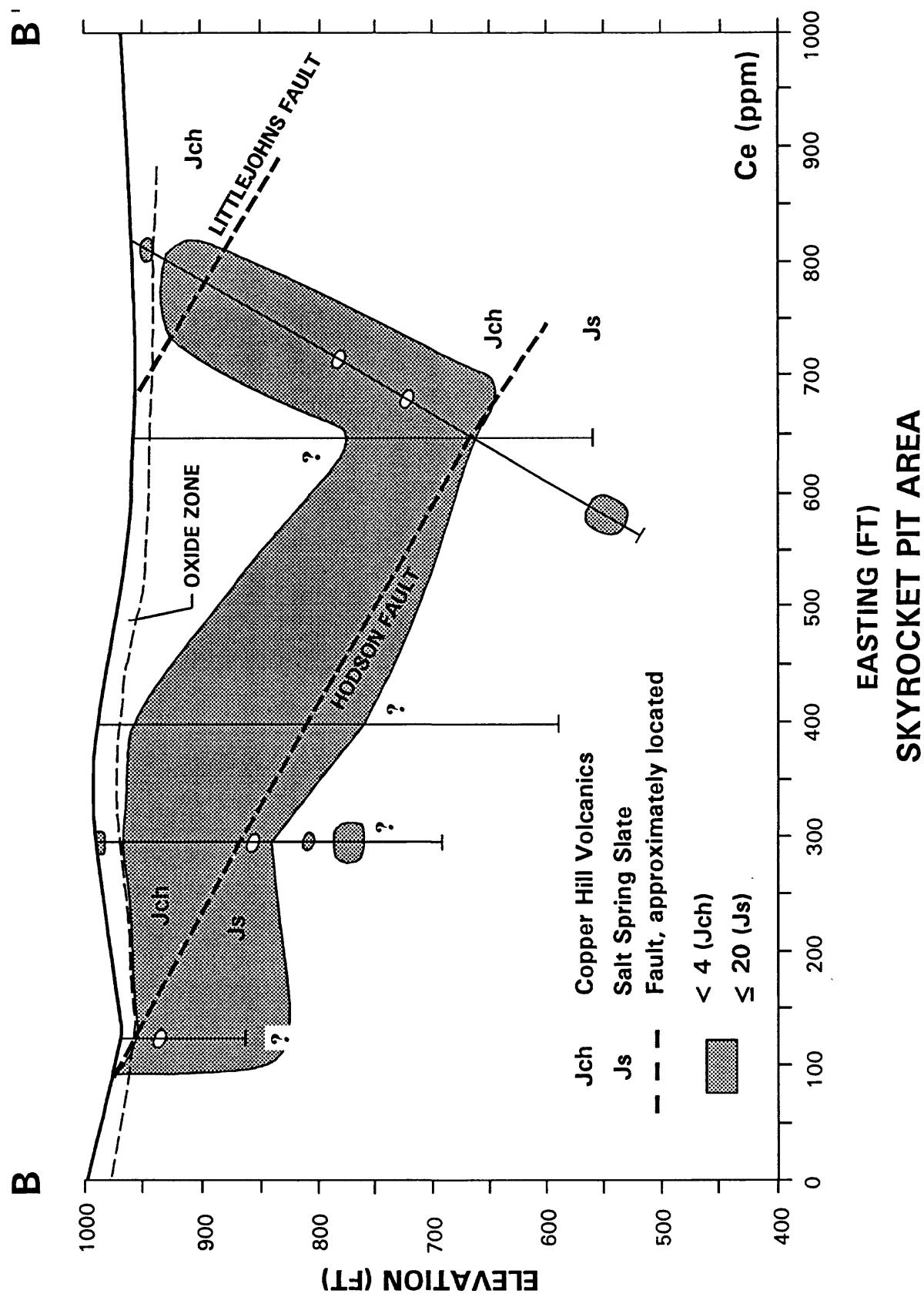
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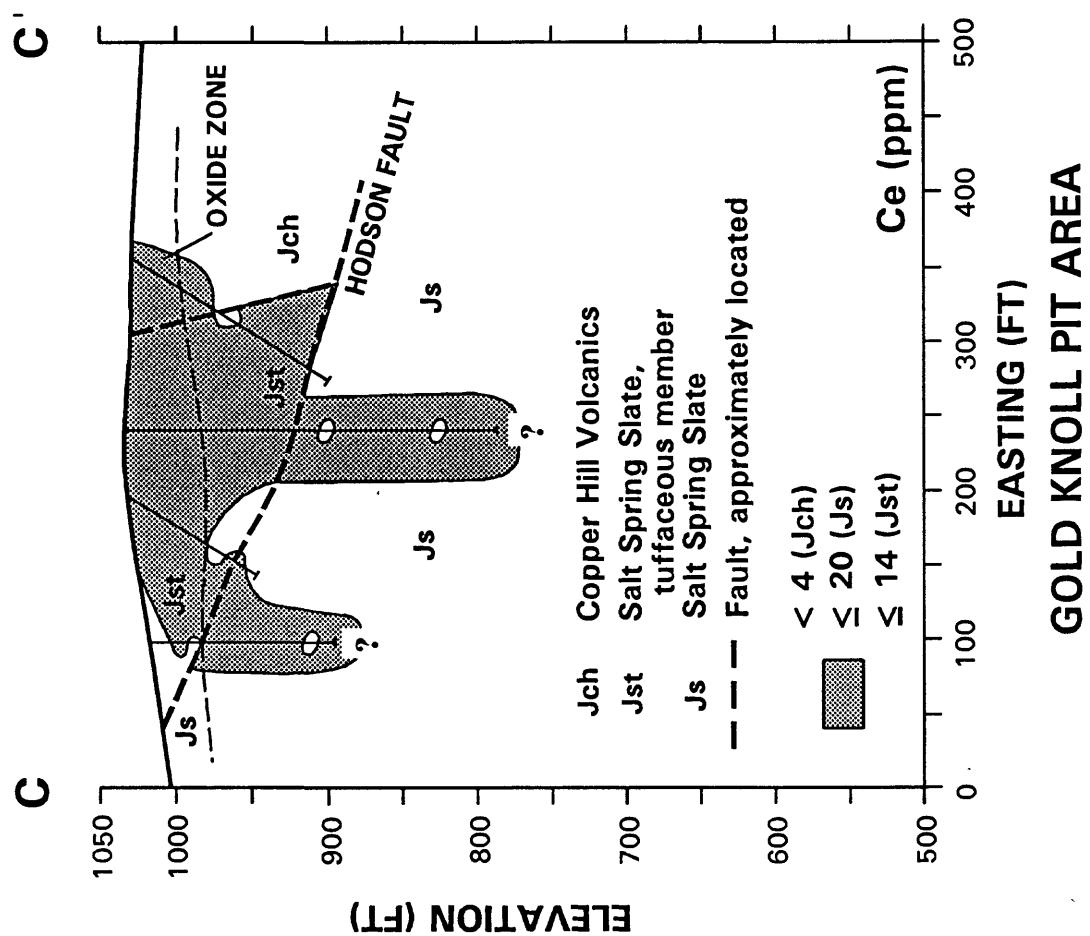


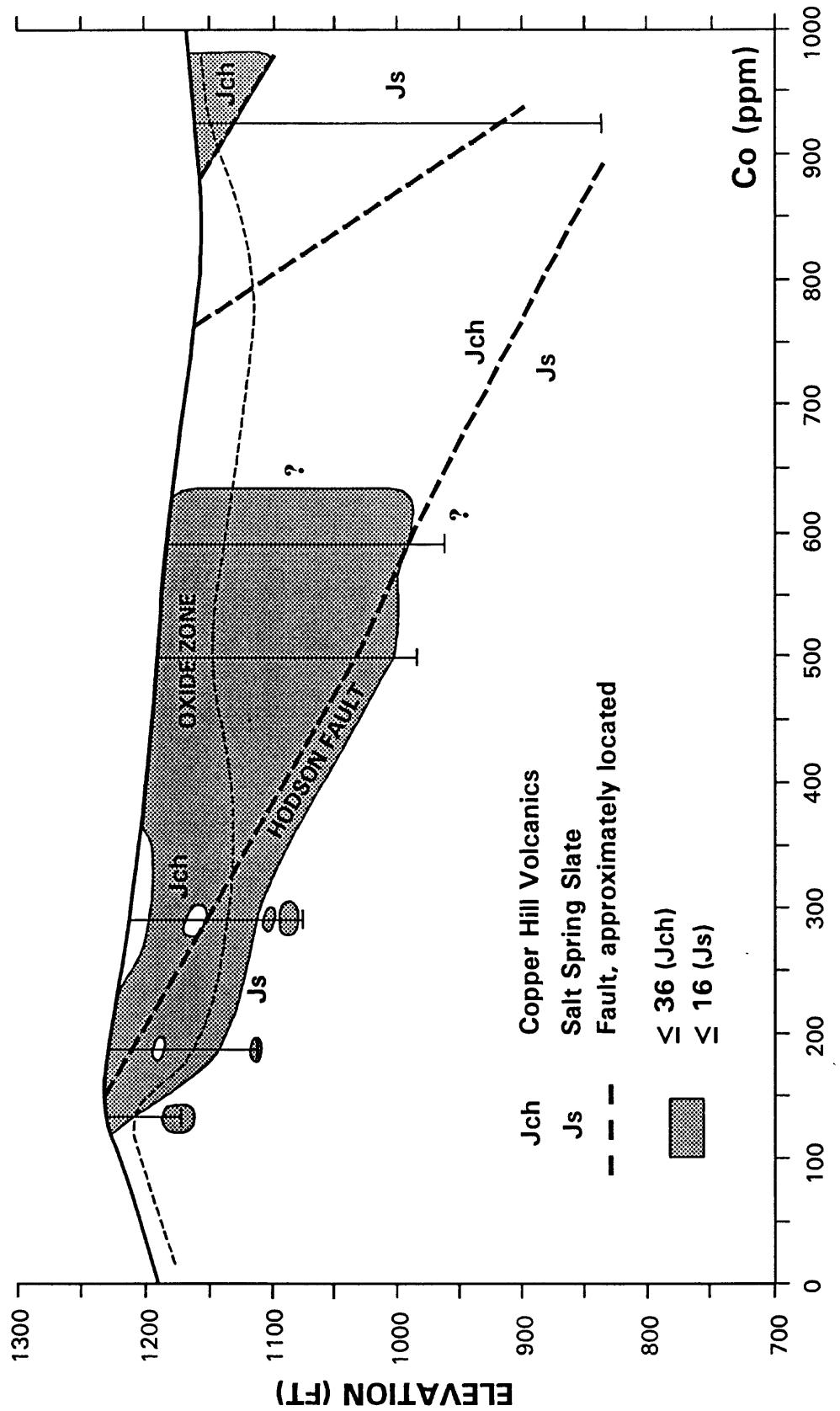


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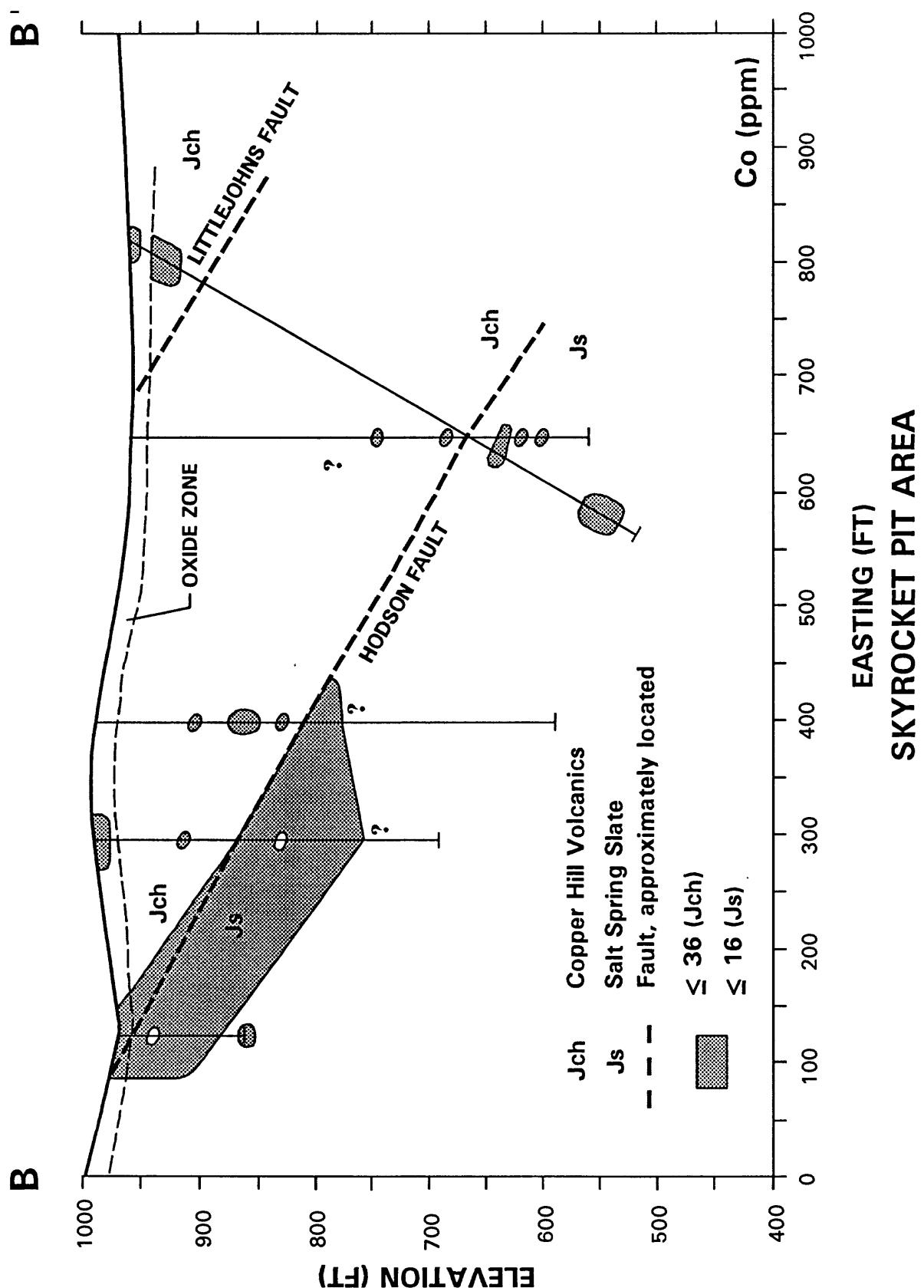


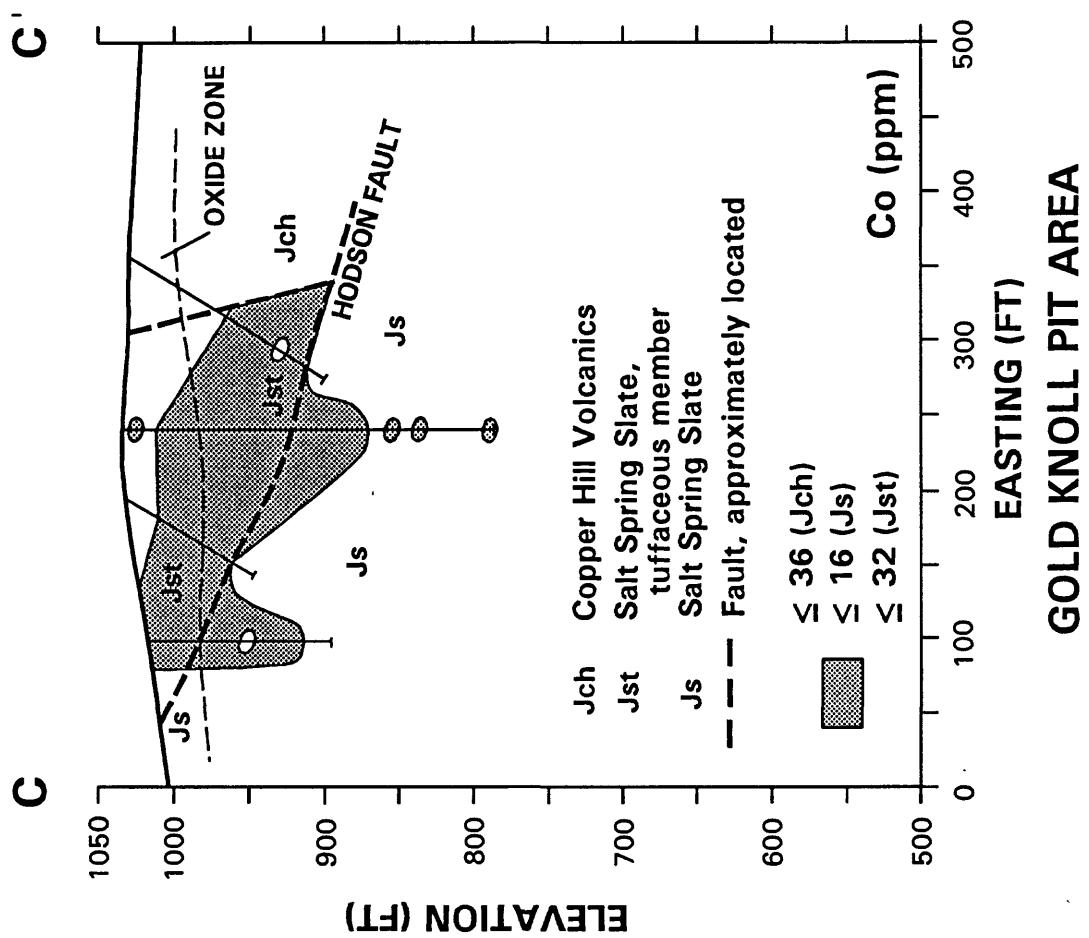


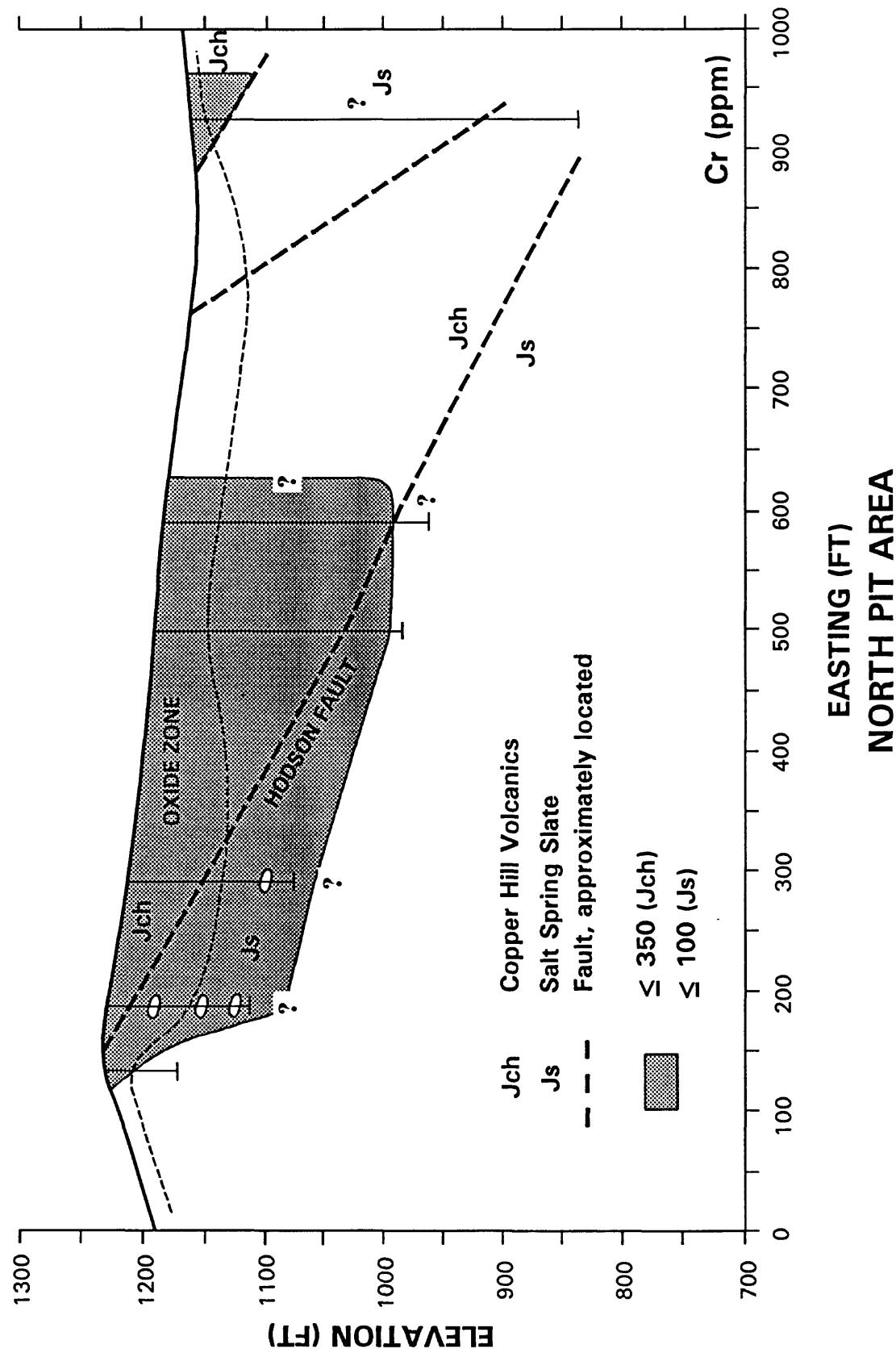


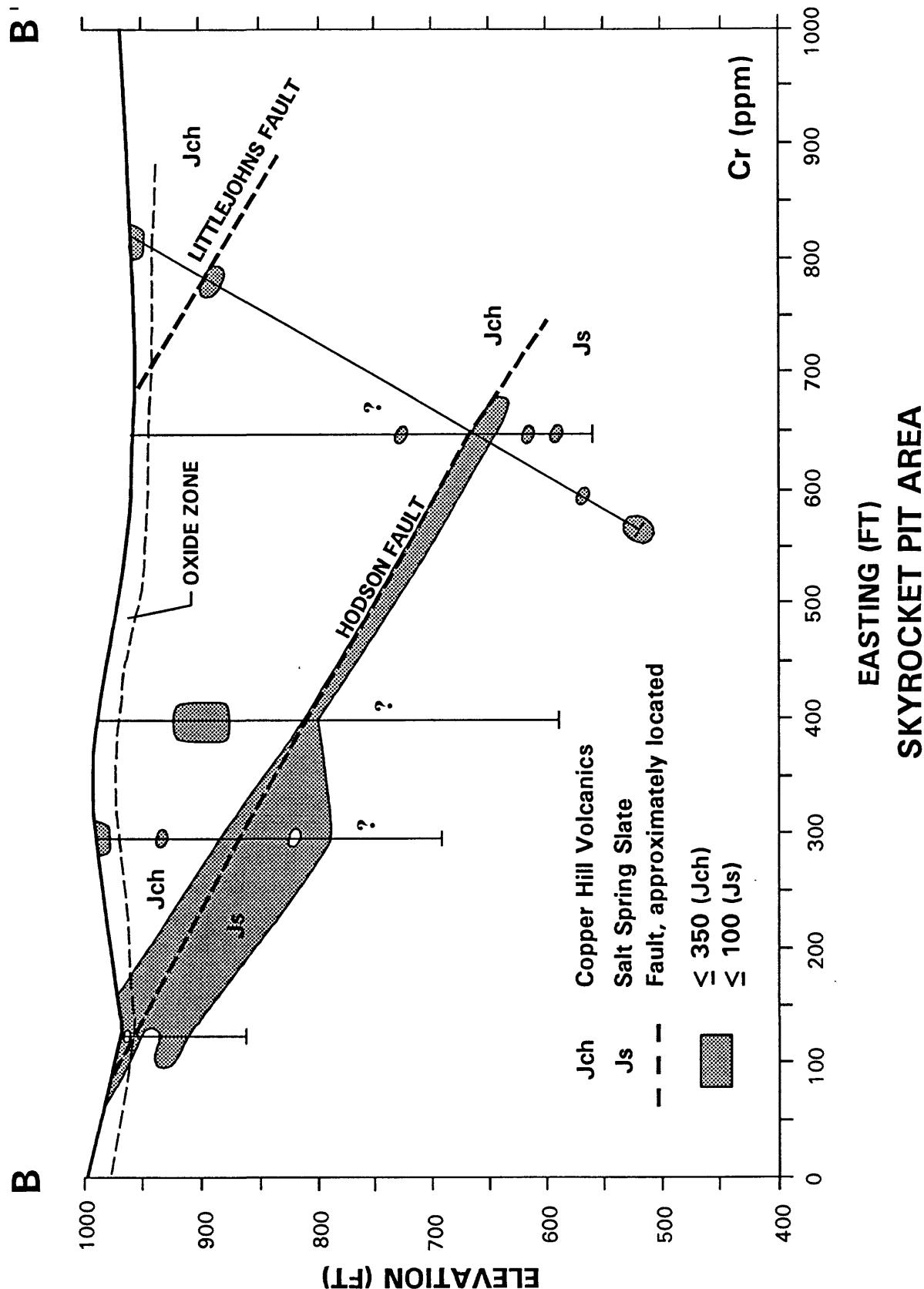
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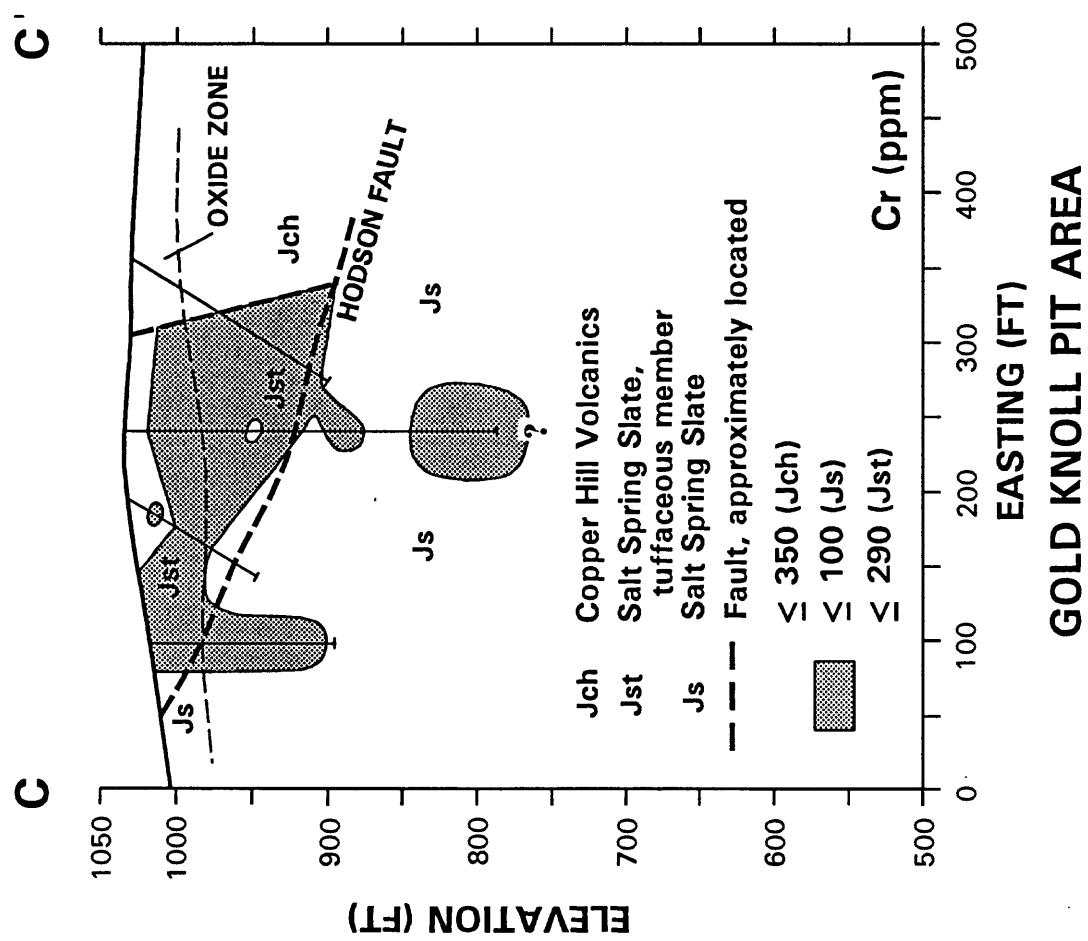
EASTING (FT)
NORTH PIT AREA

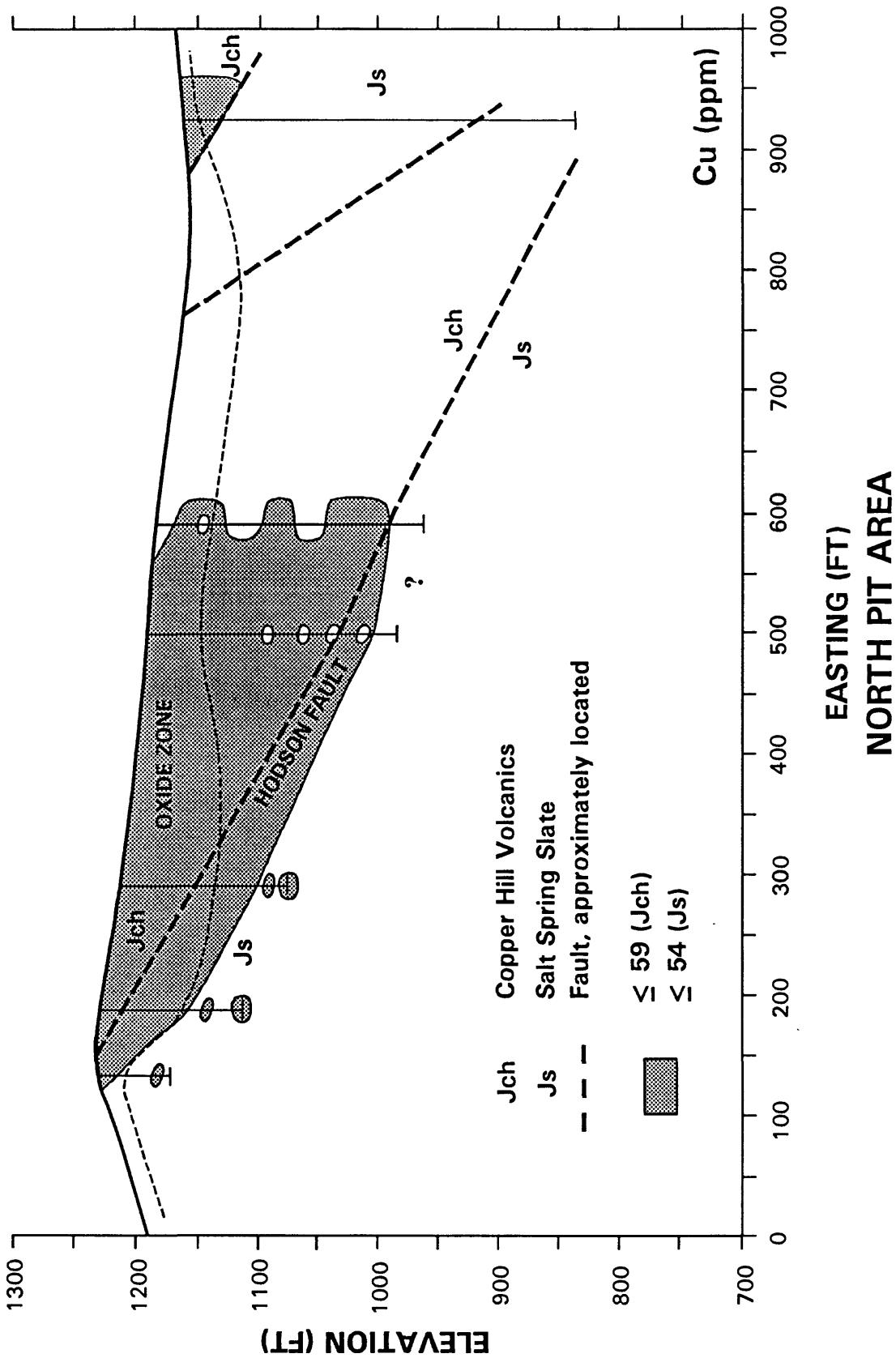


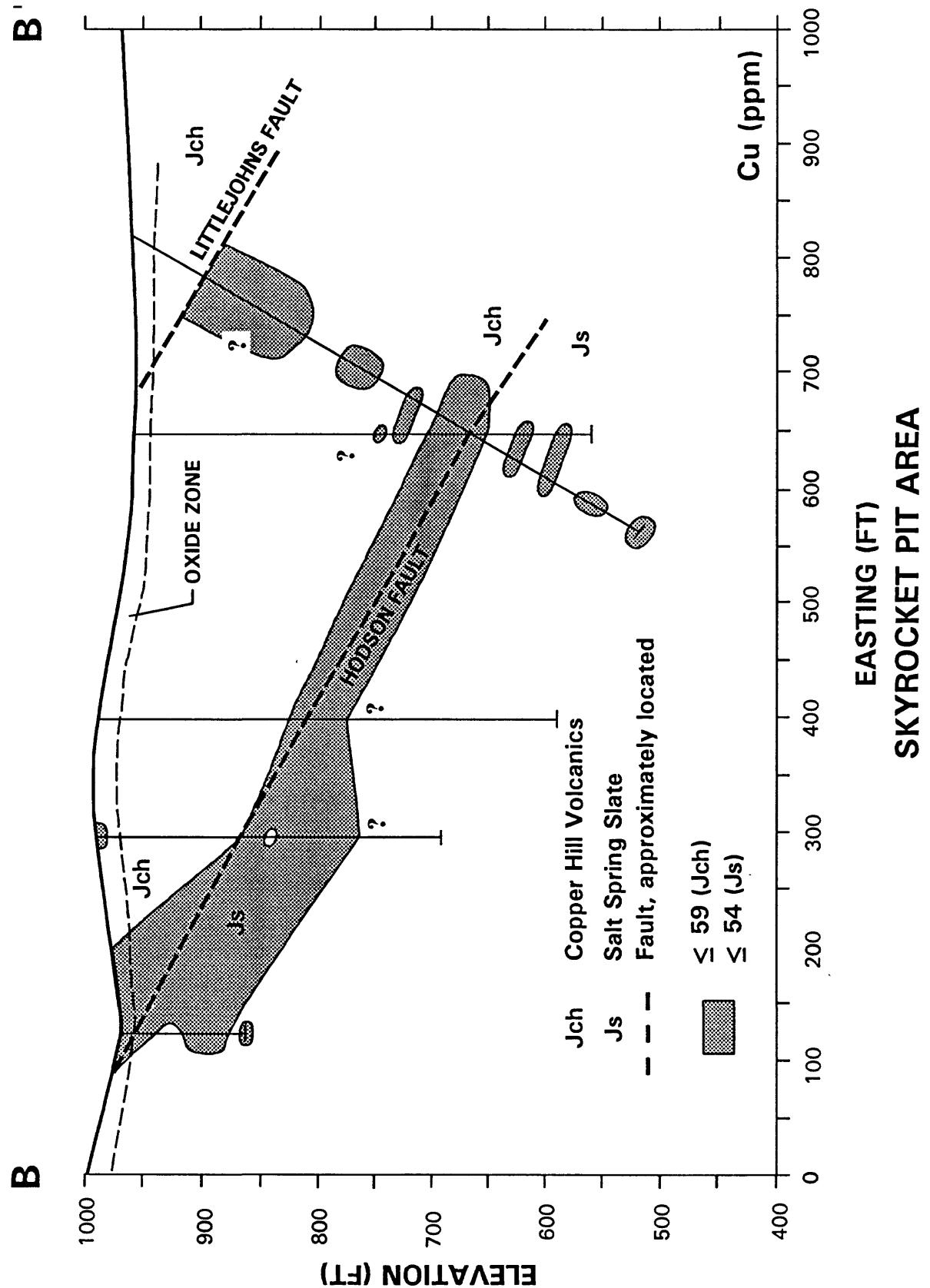


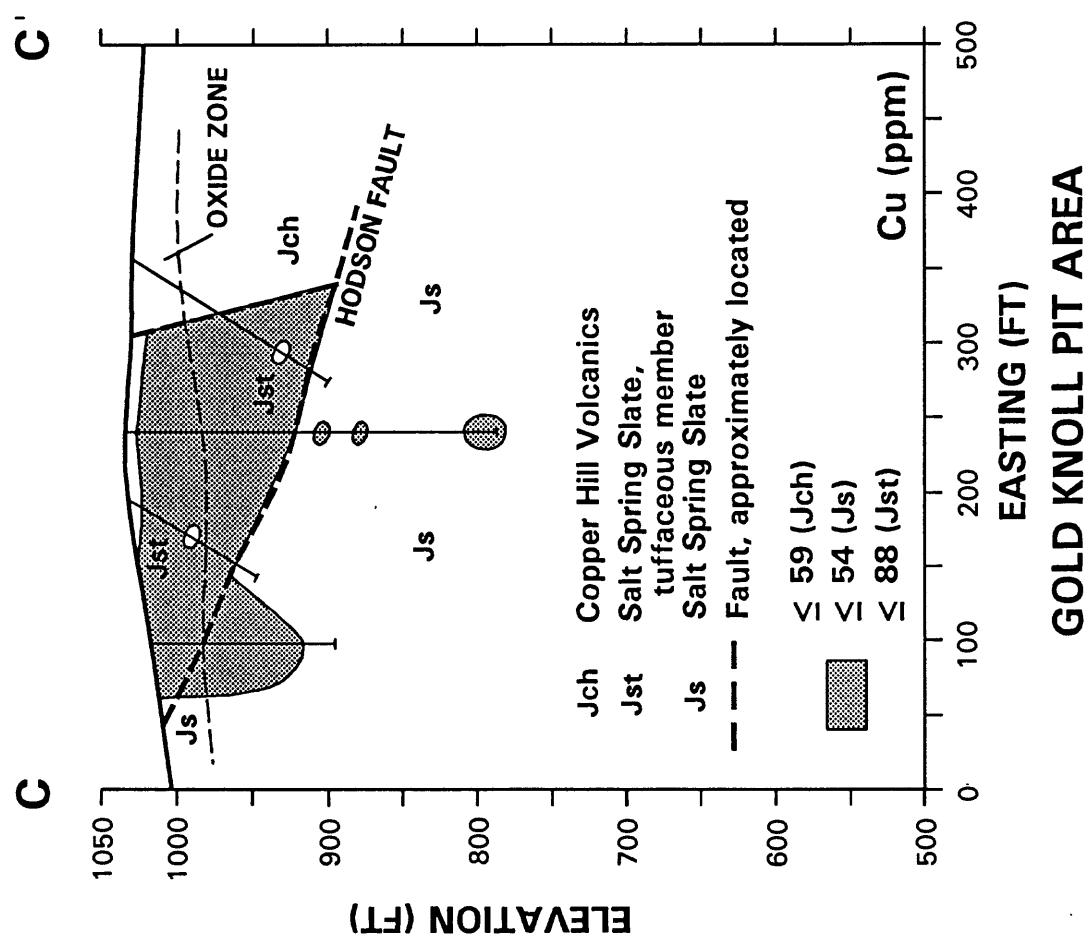
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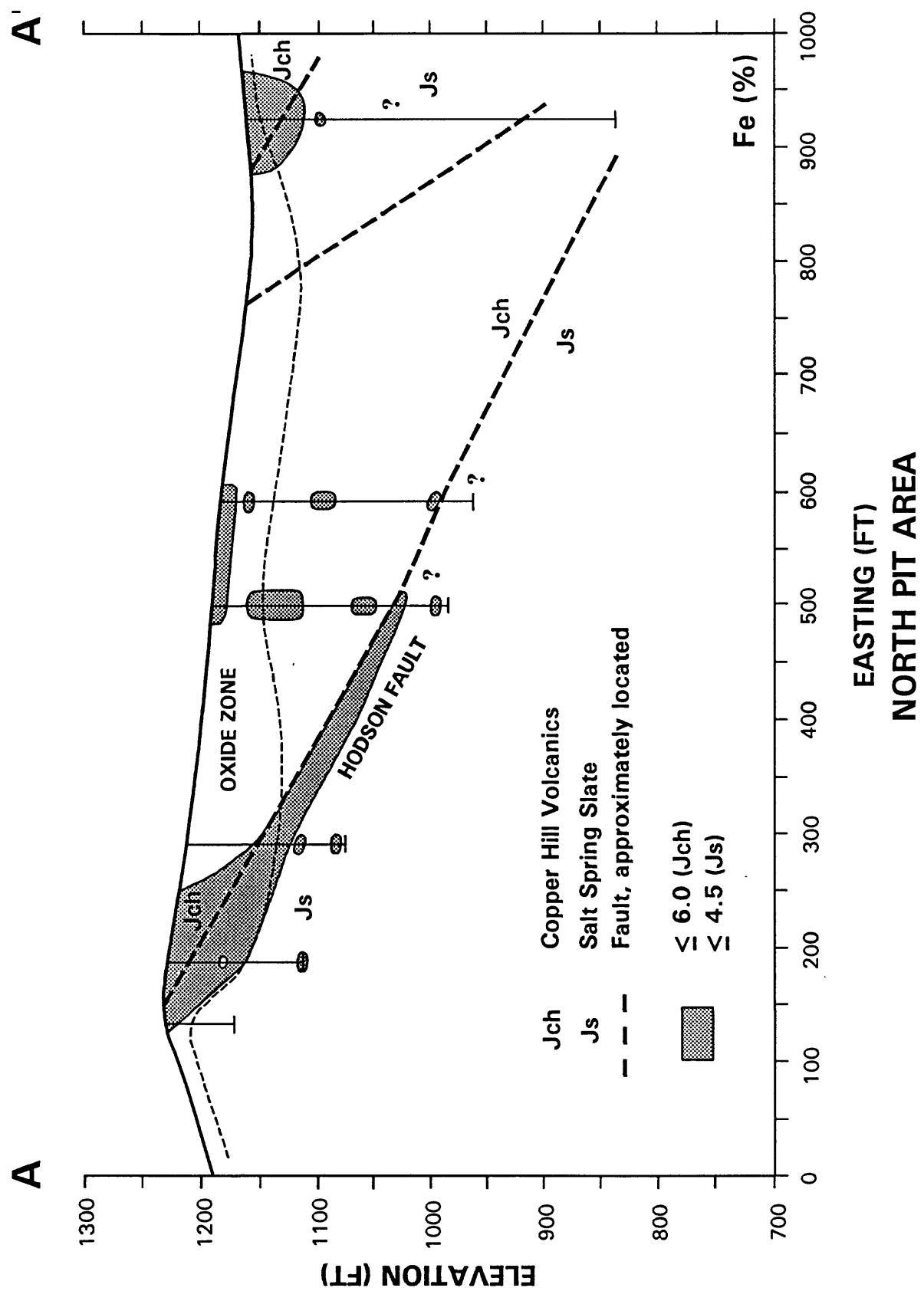




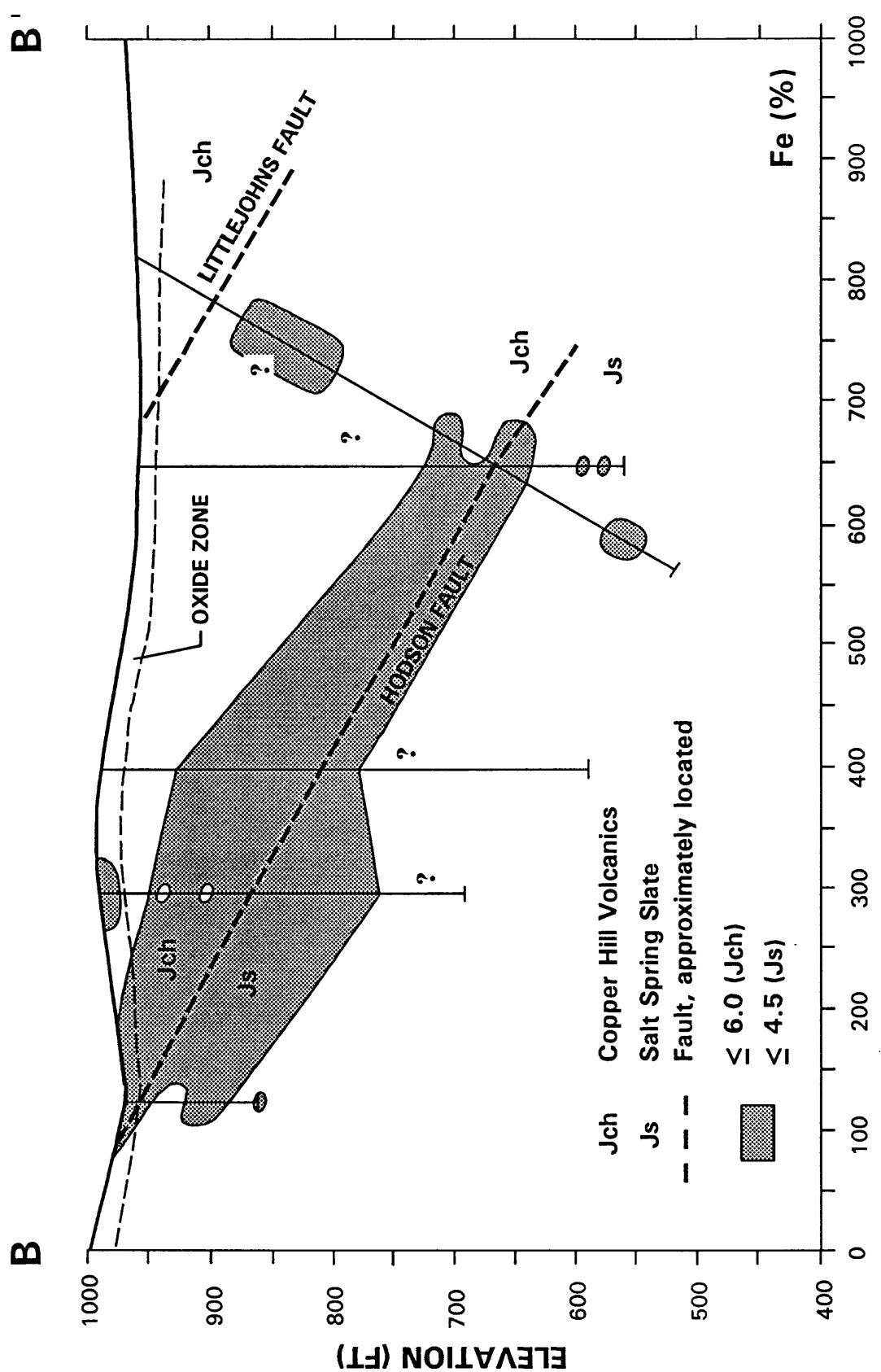
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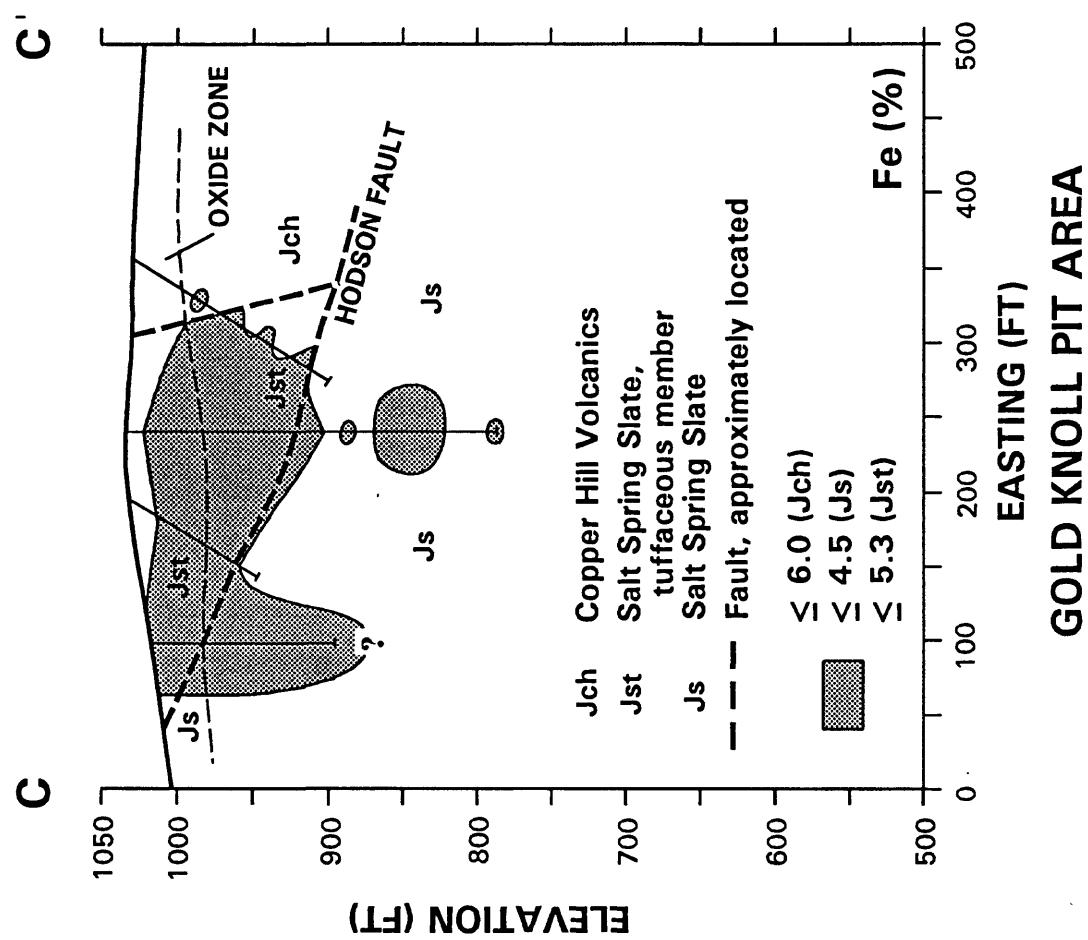






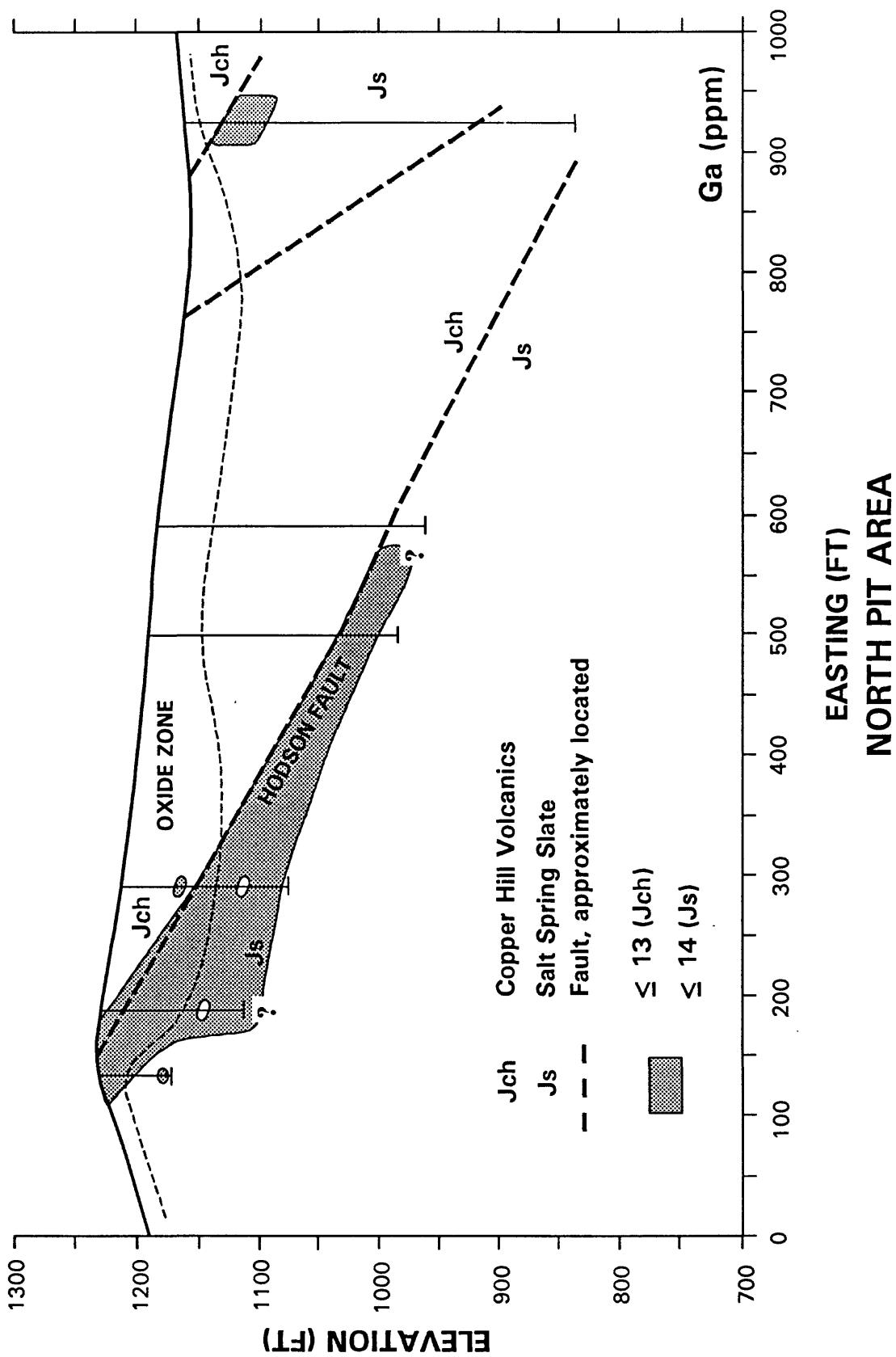
SKYROCKET PIT AREA

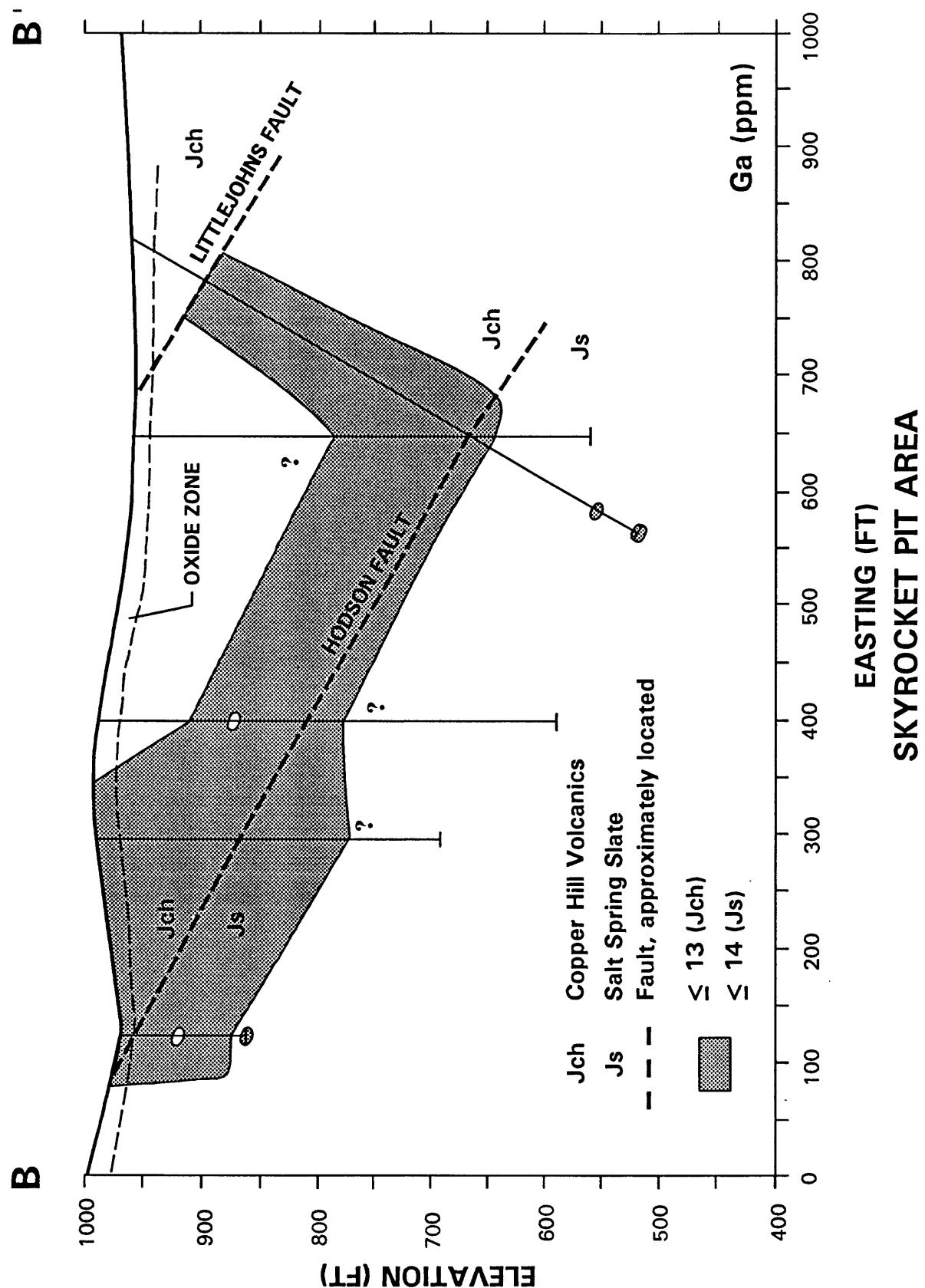


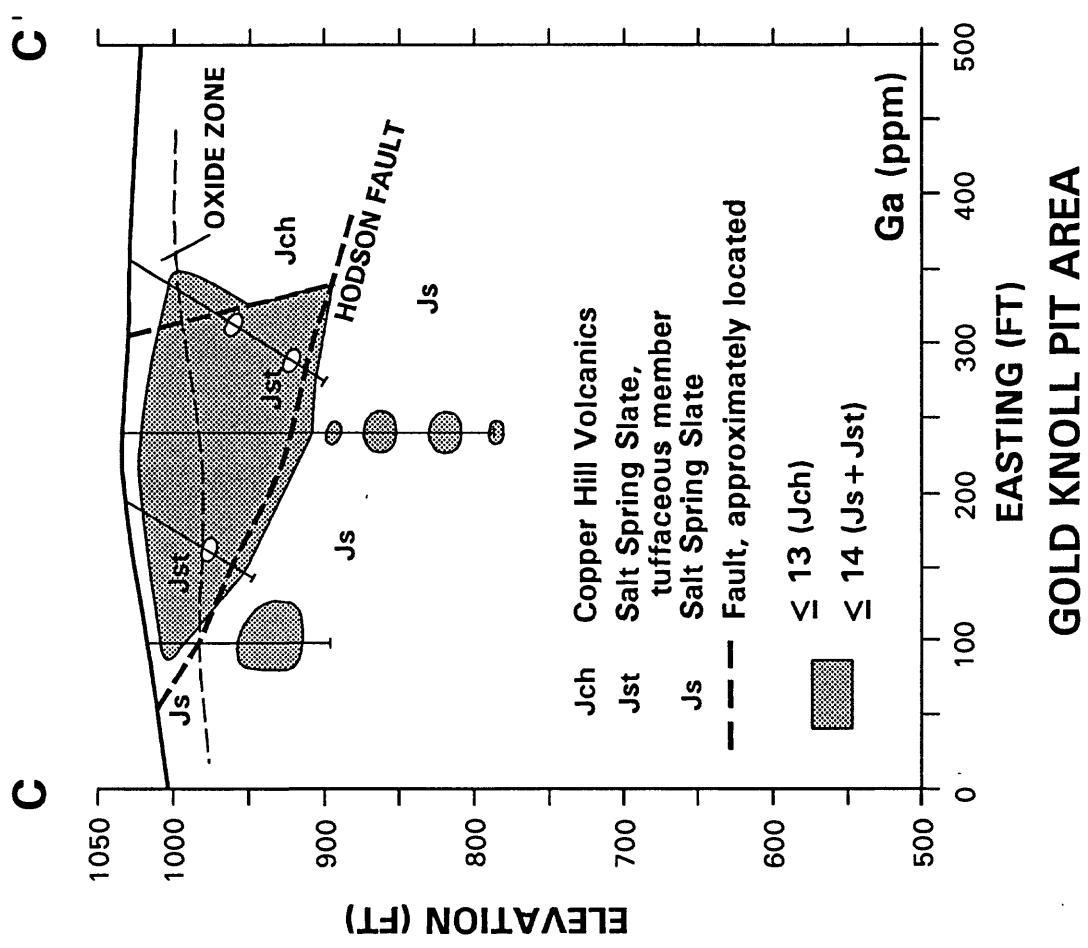


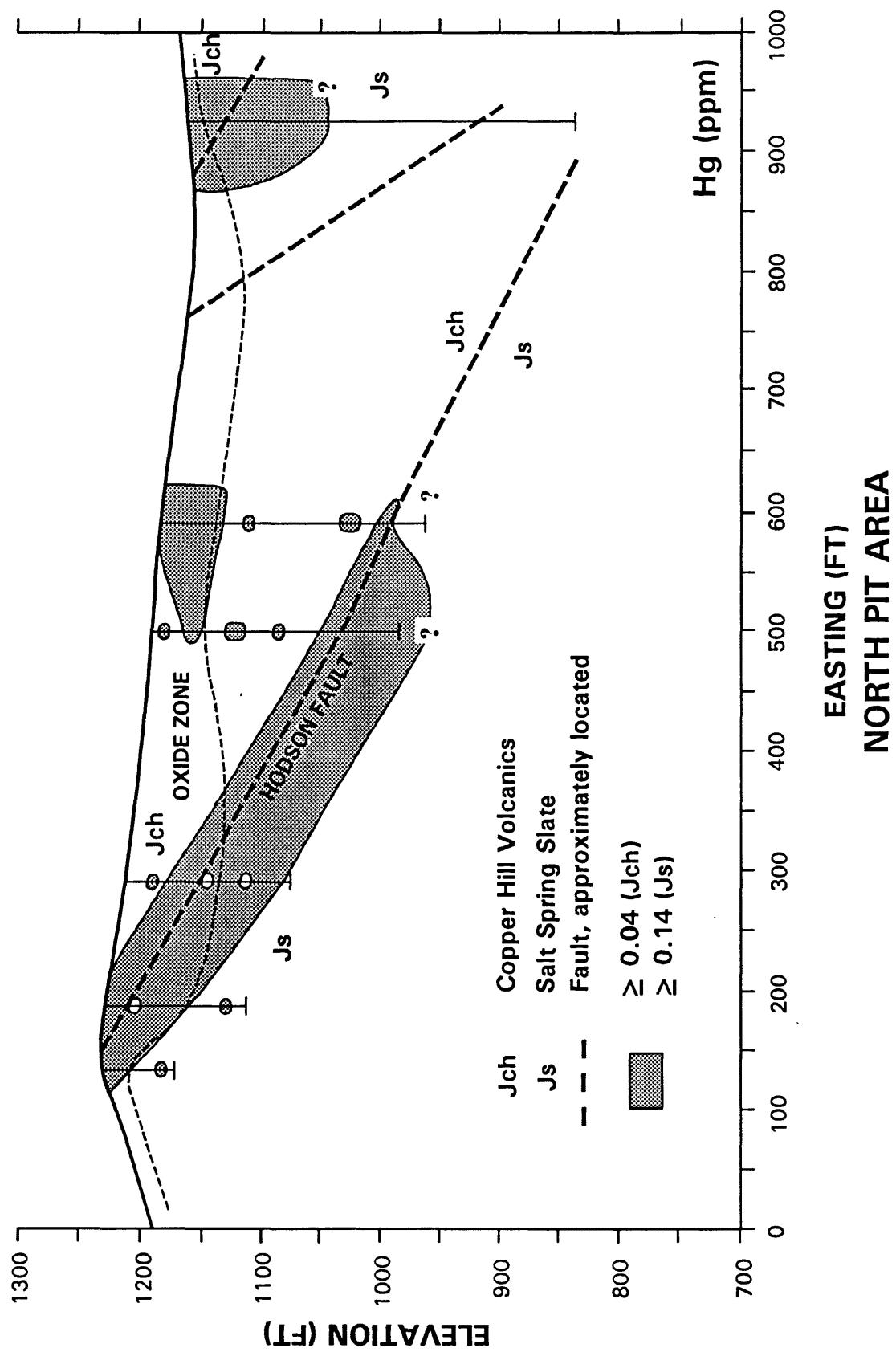
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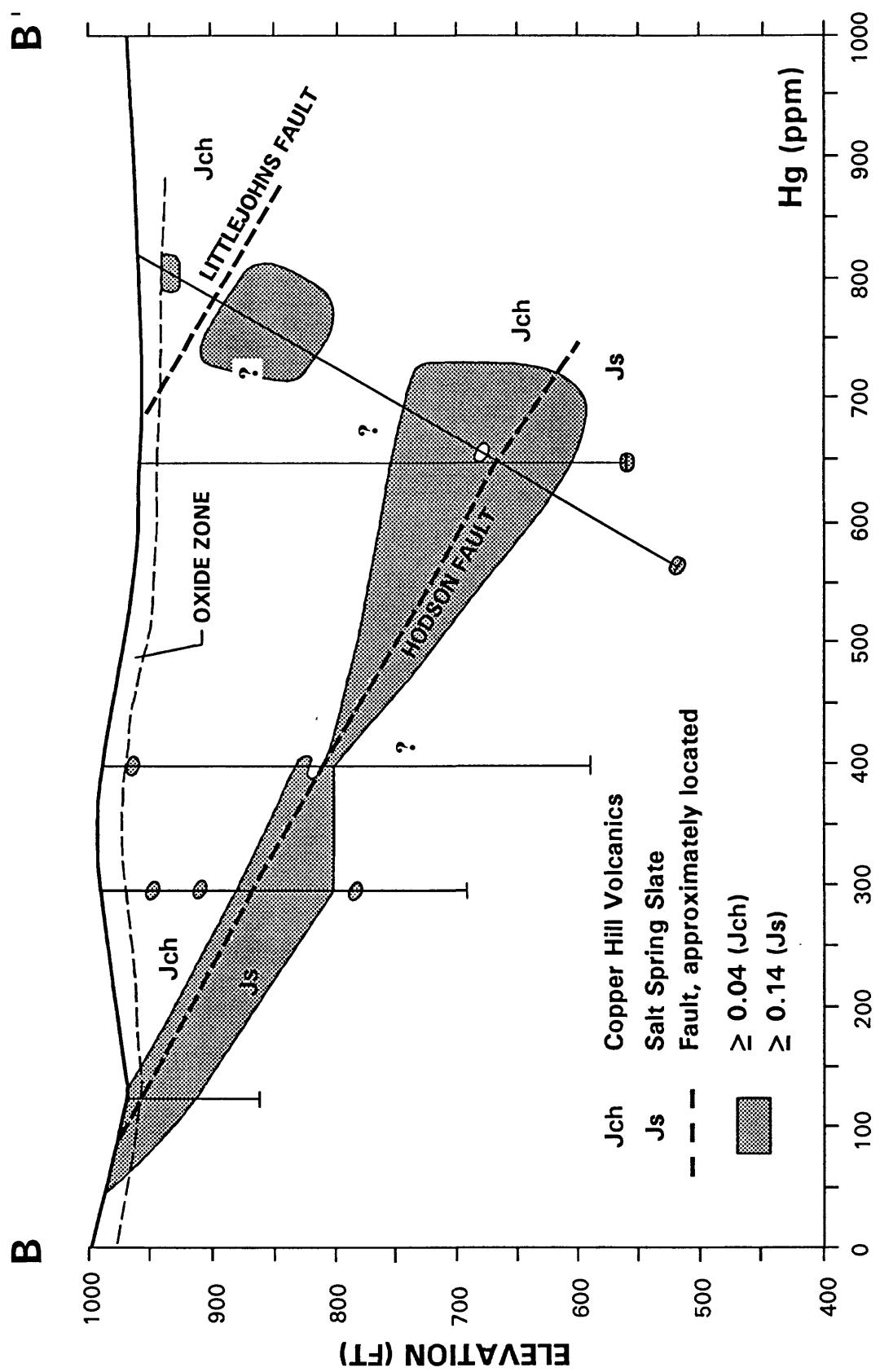


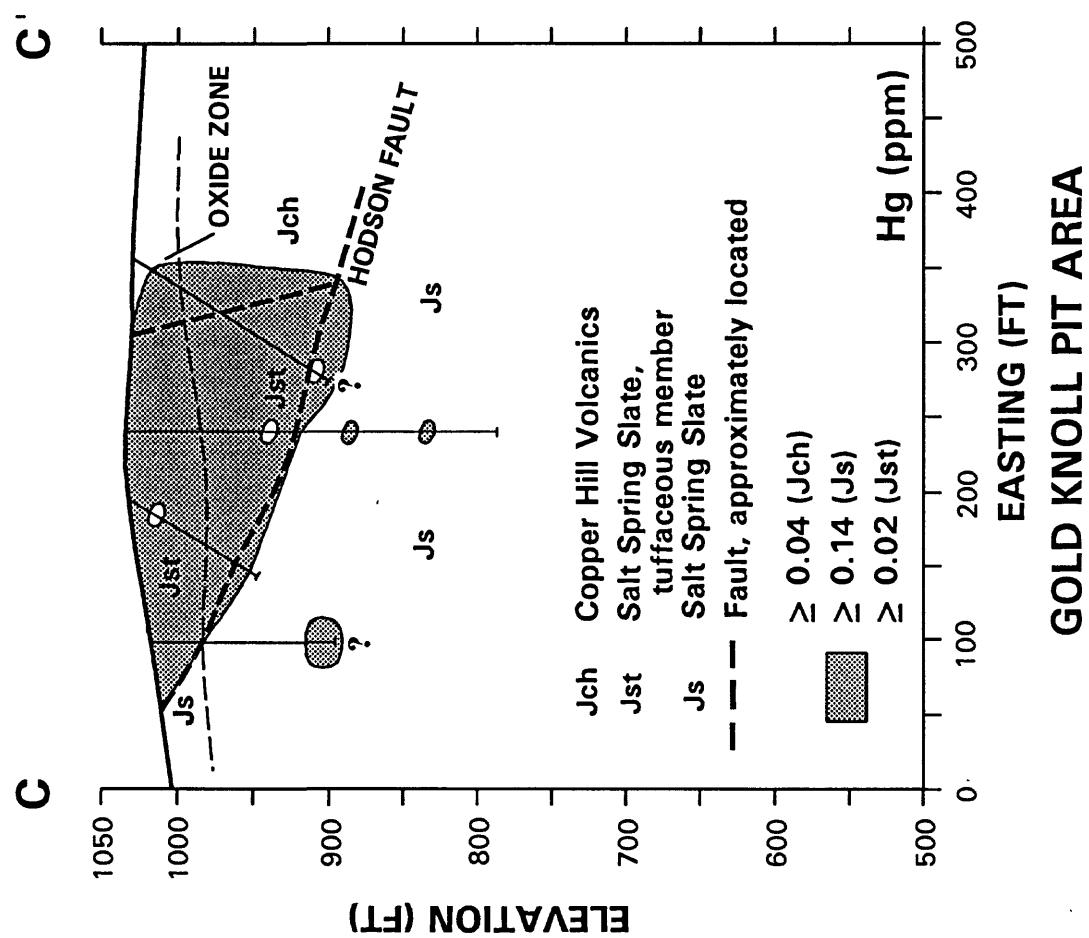




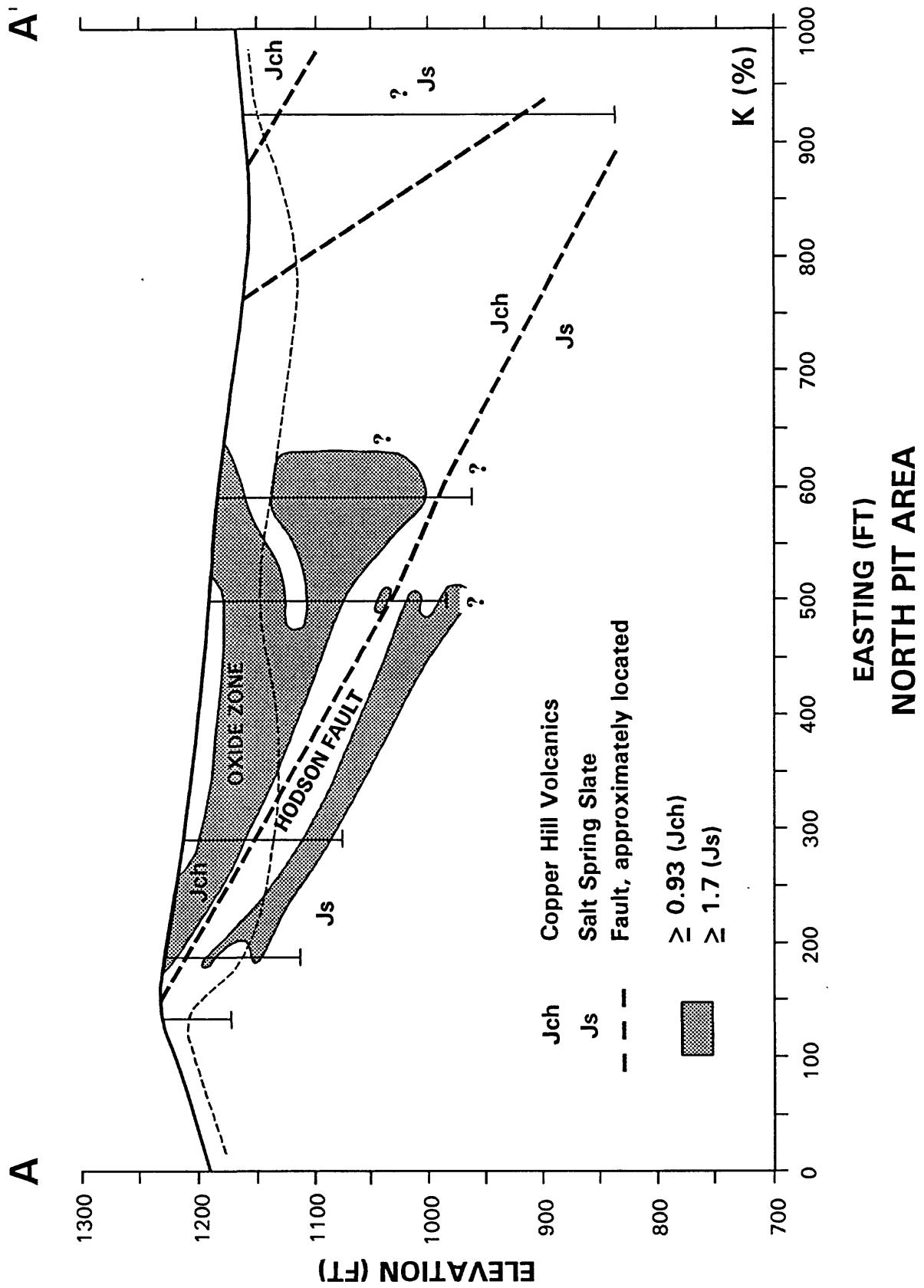
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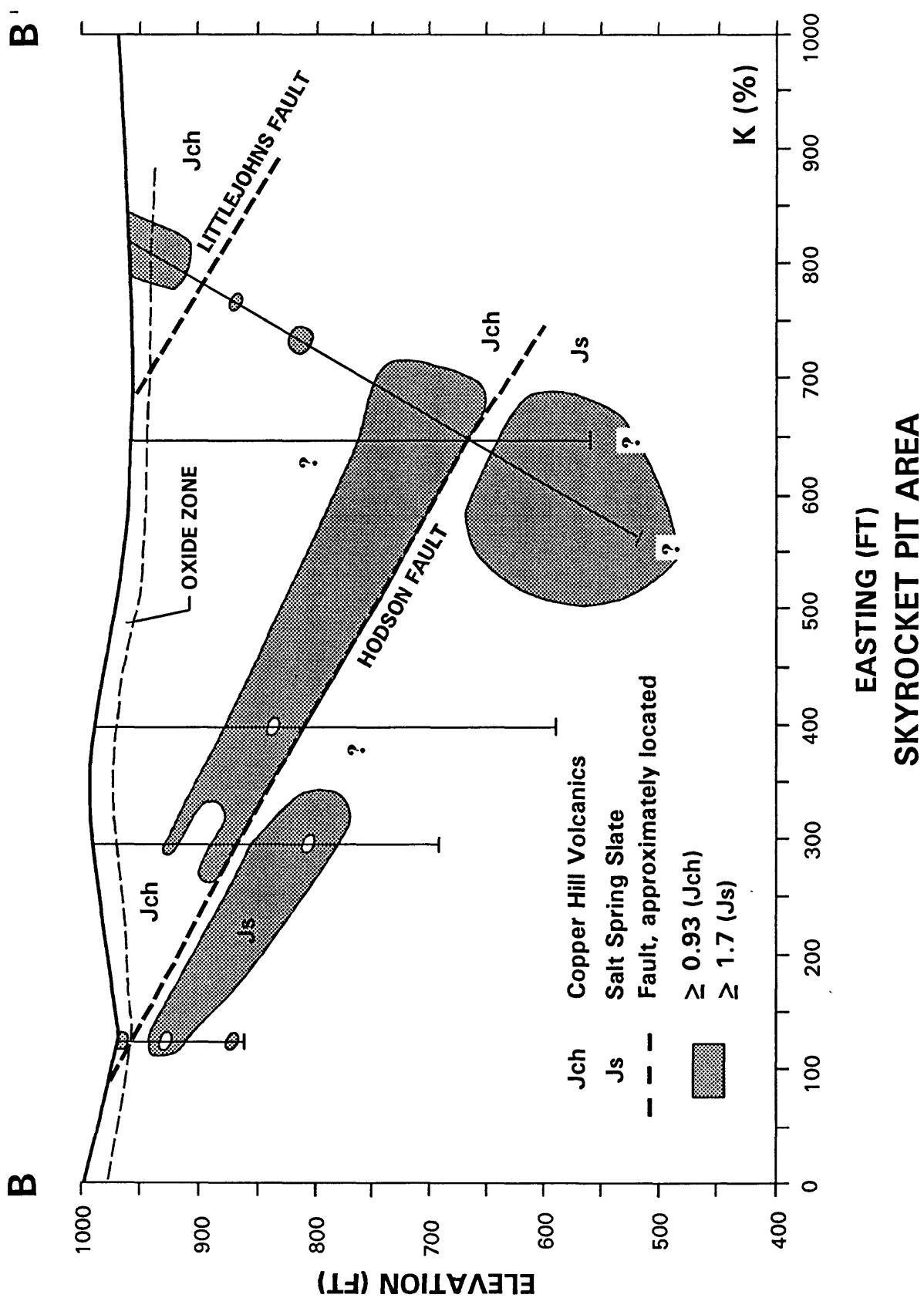
EASTING (FT)
SKYROCKET PIT AREA

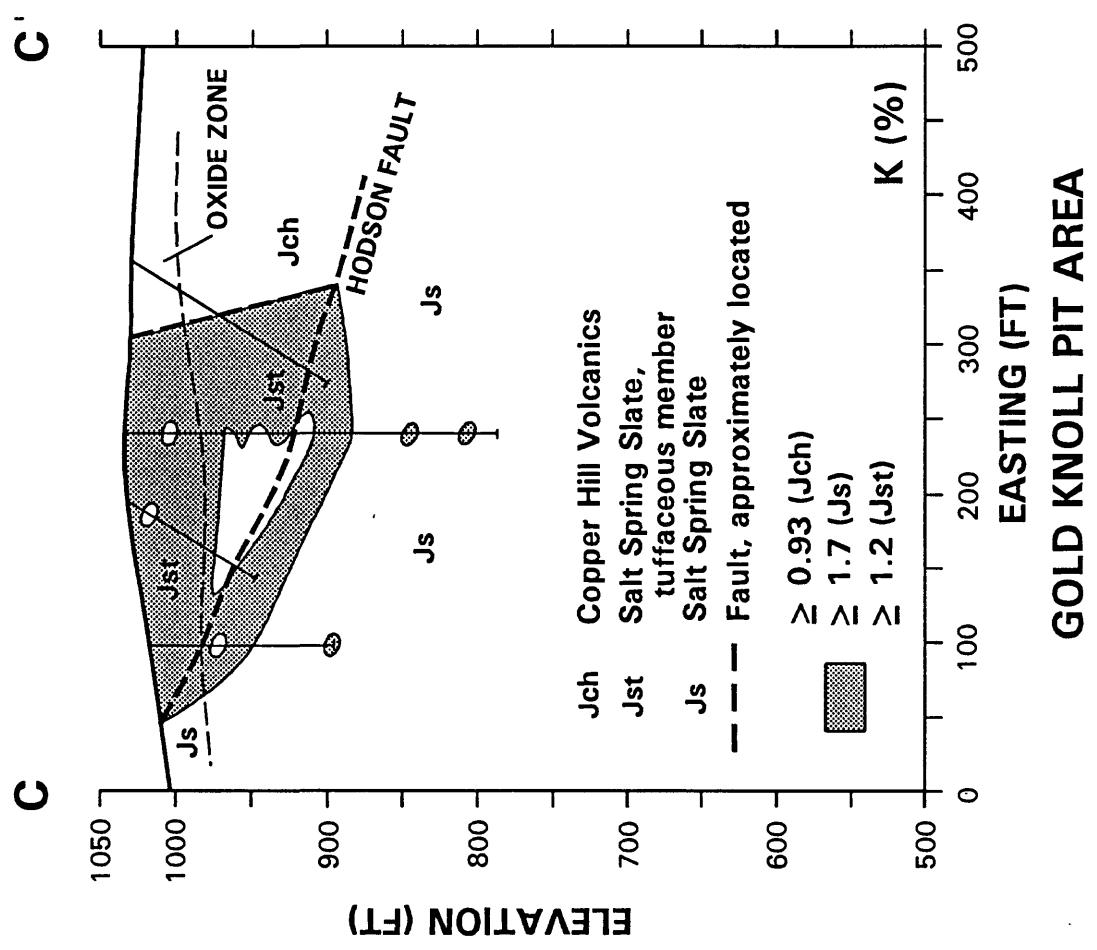


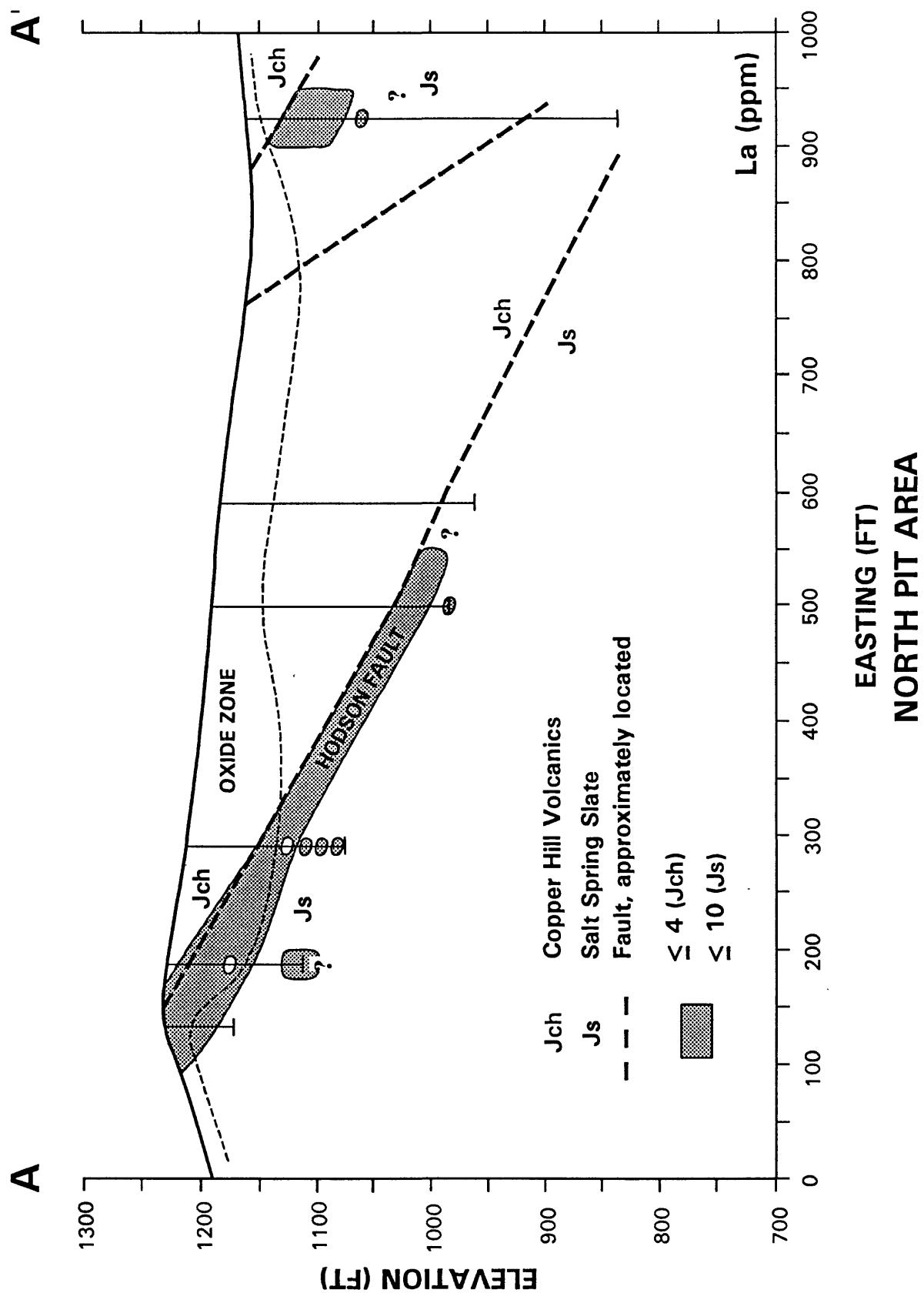


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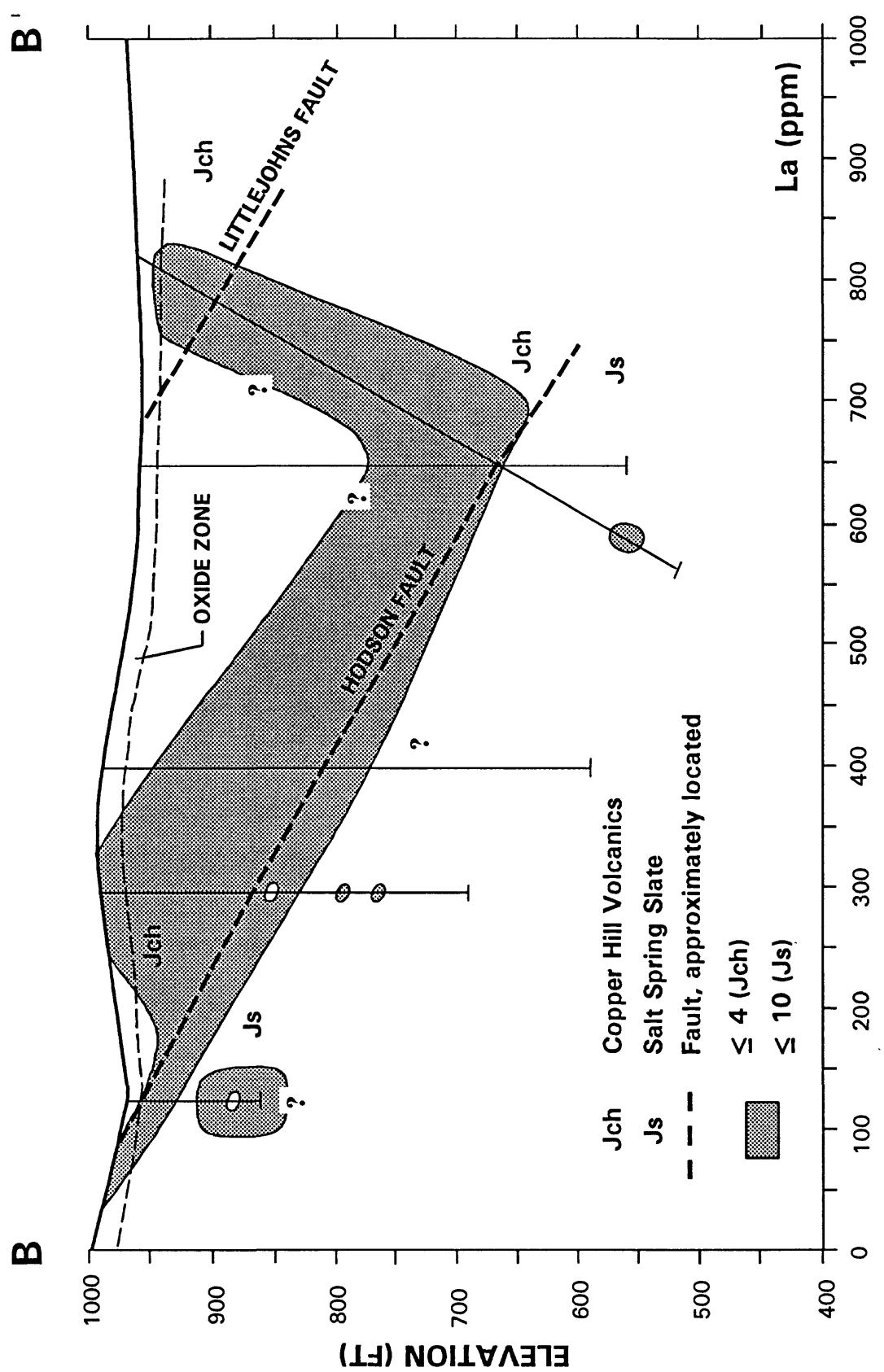


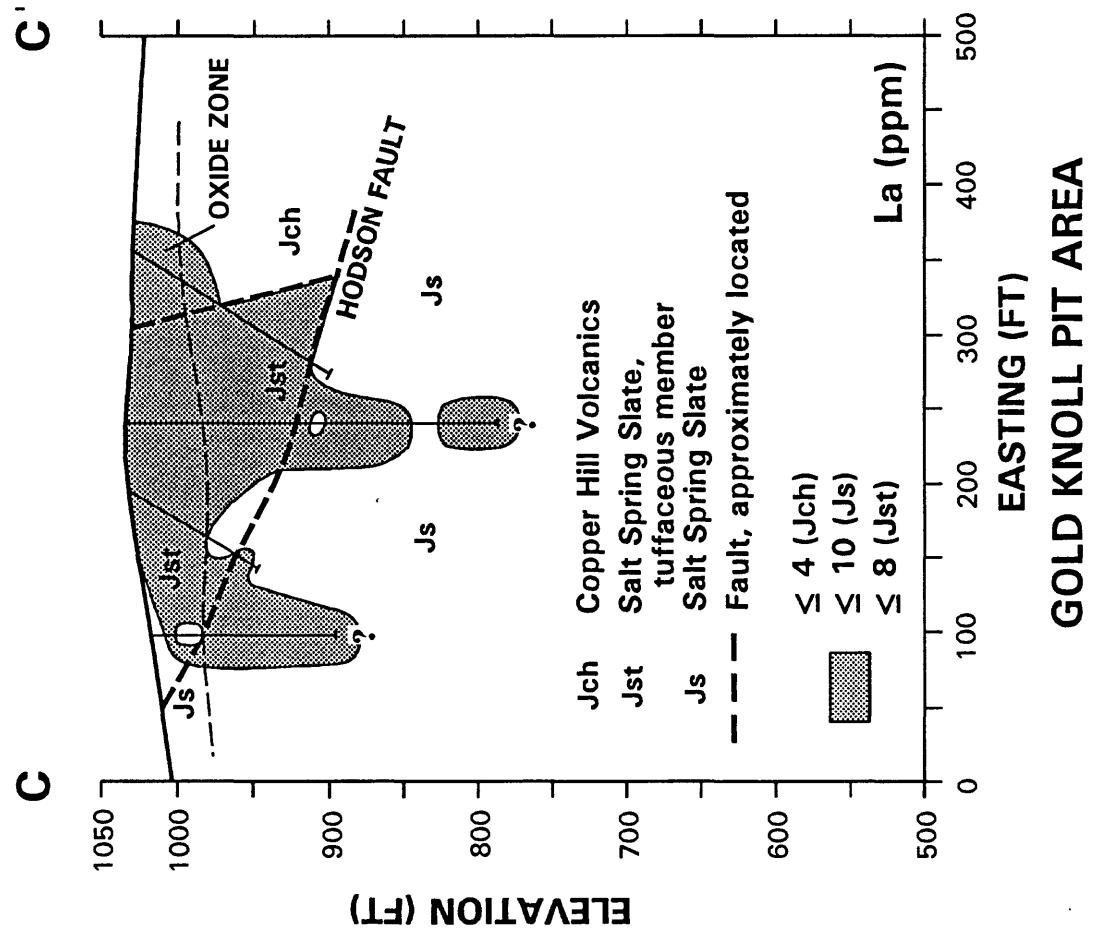






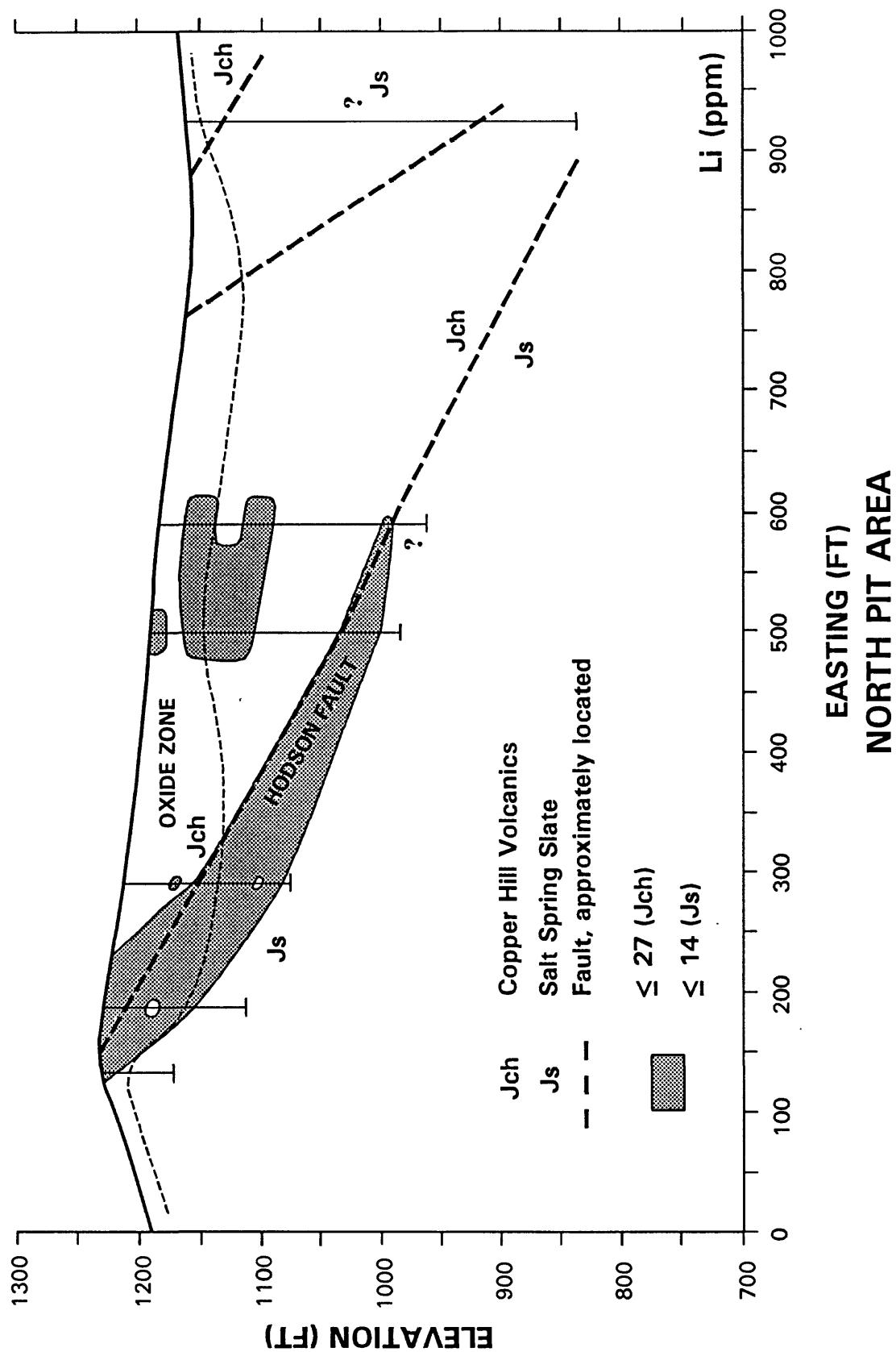
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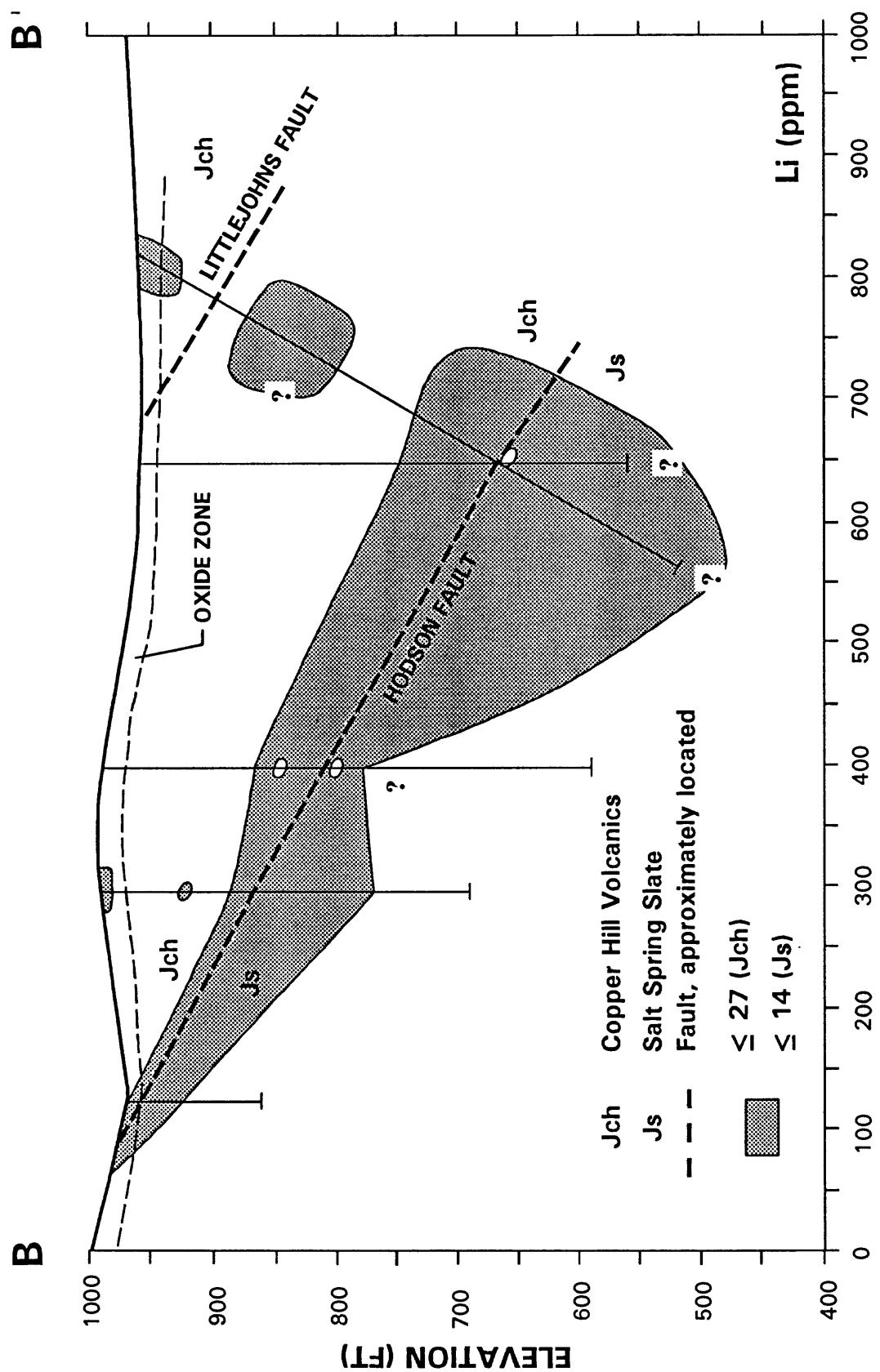


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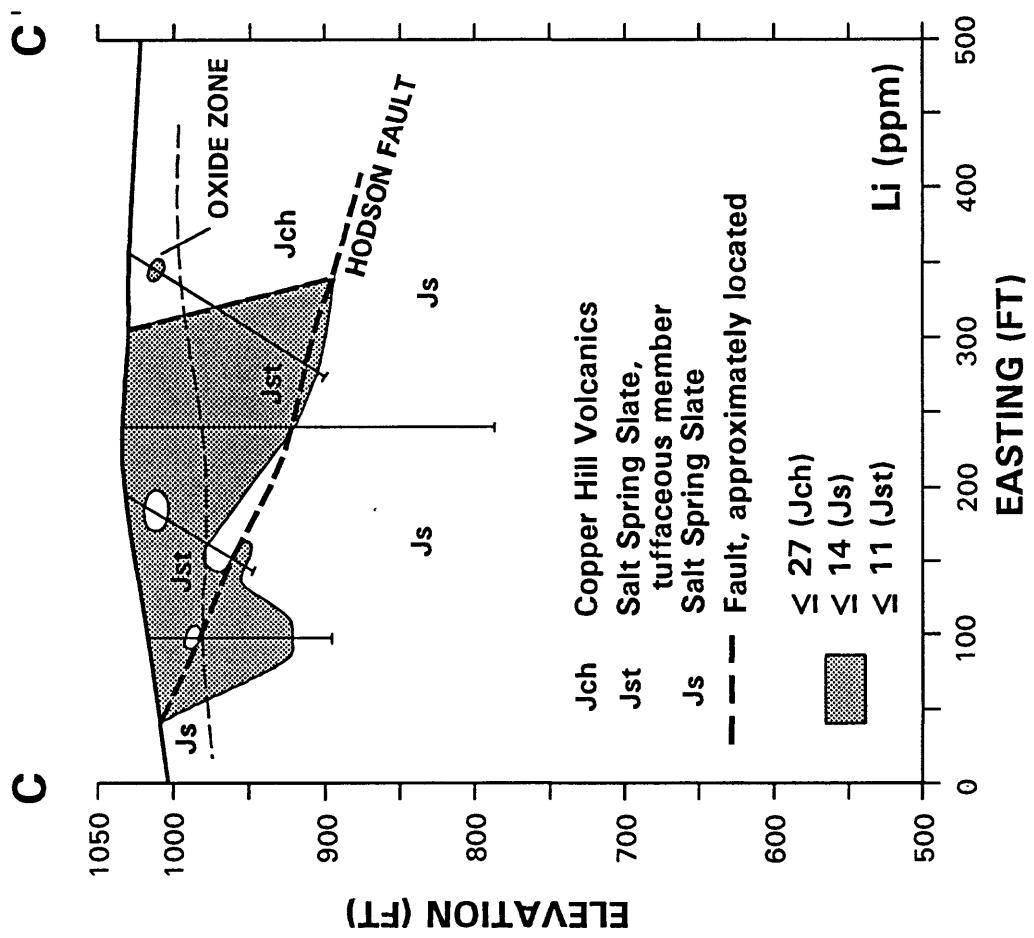
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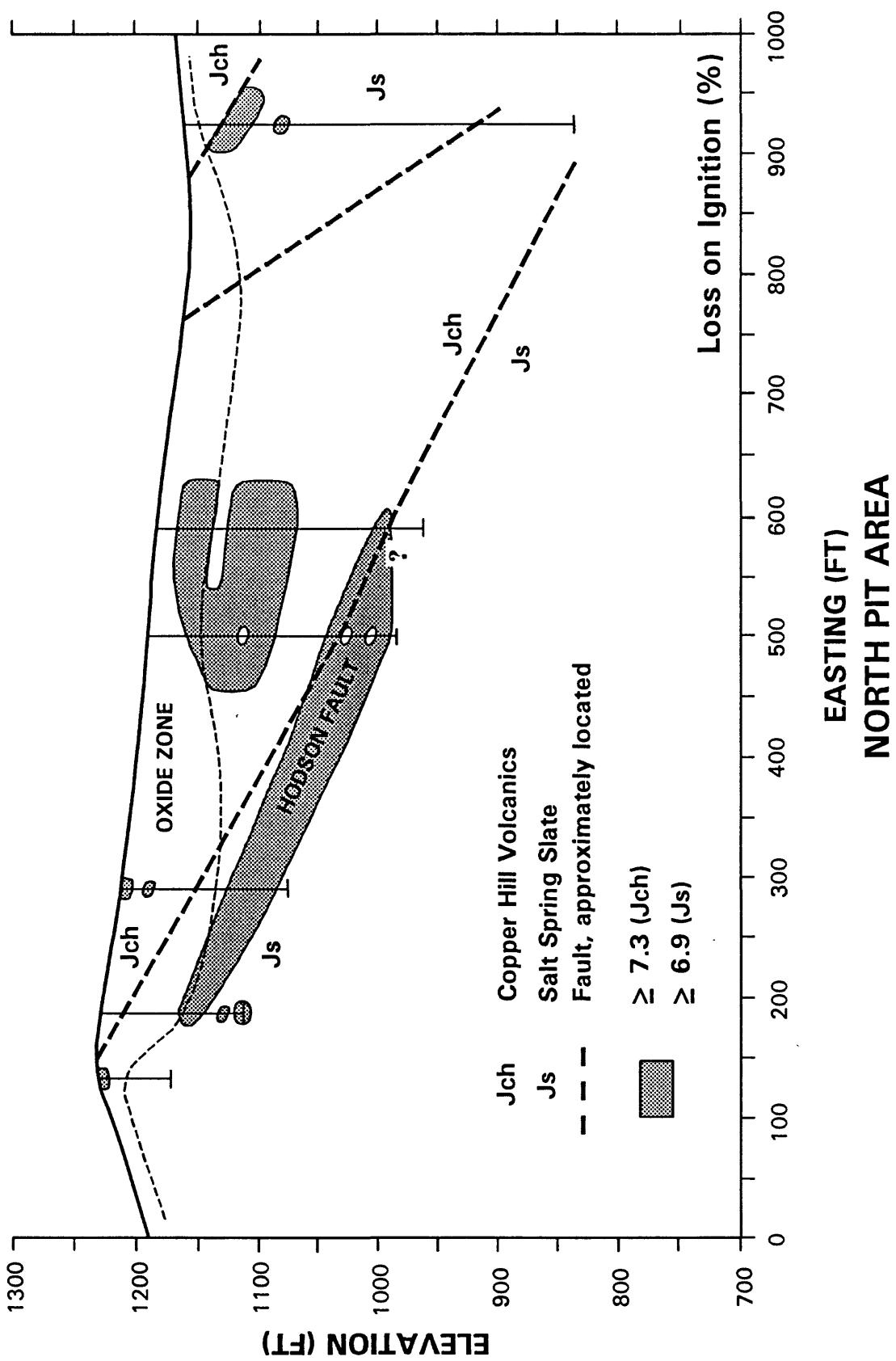


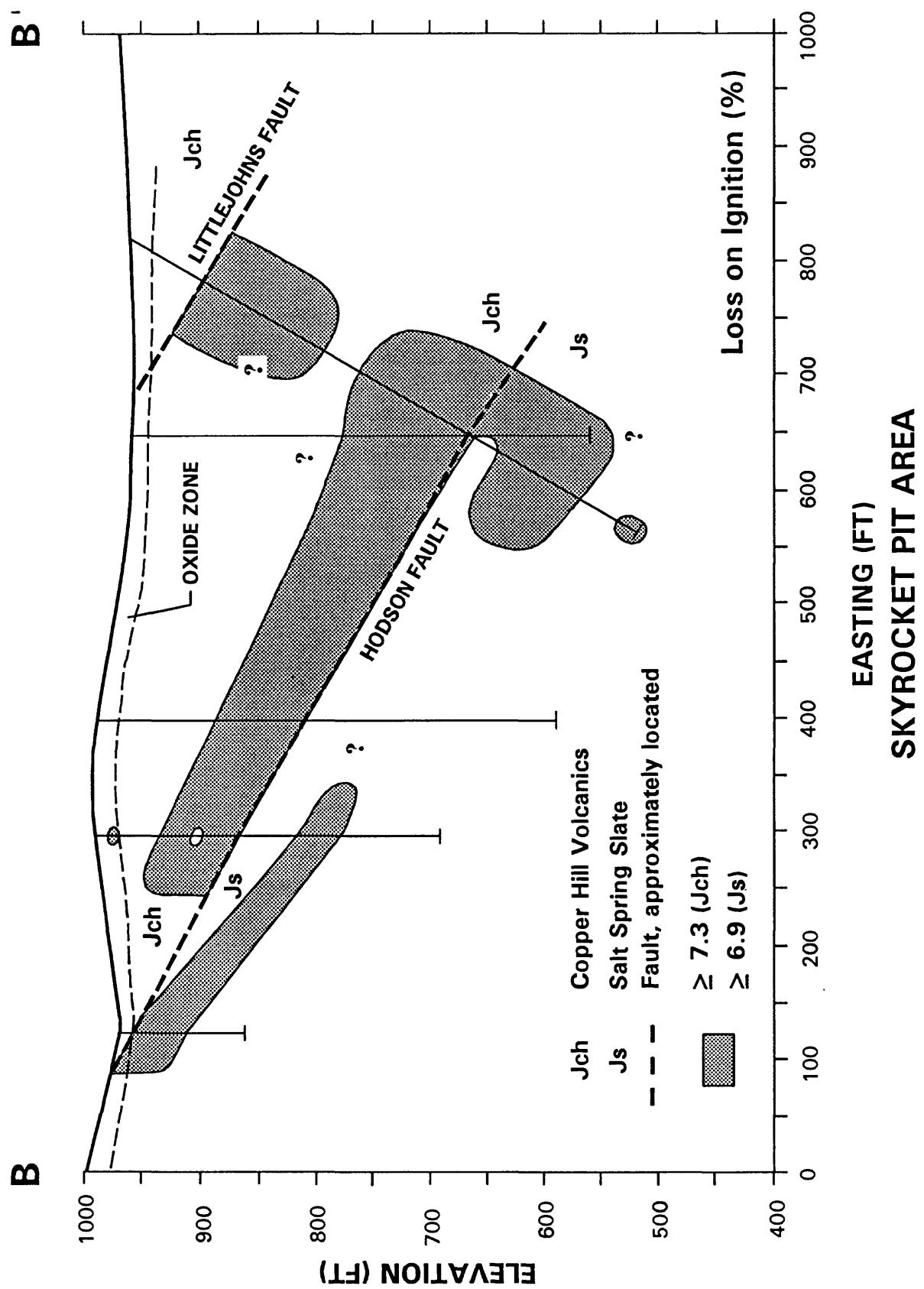
EASTING (FT)
SKYROCKET PIT AREA

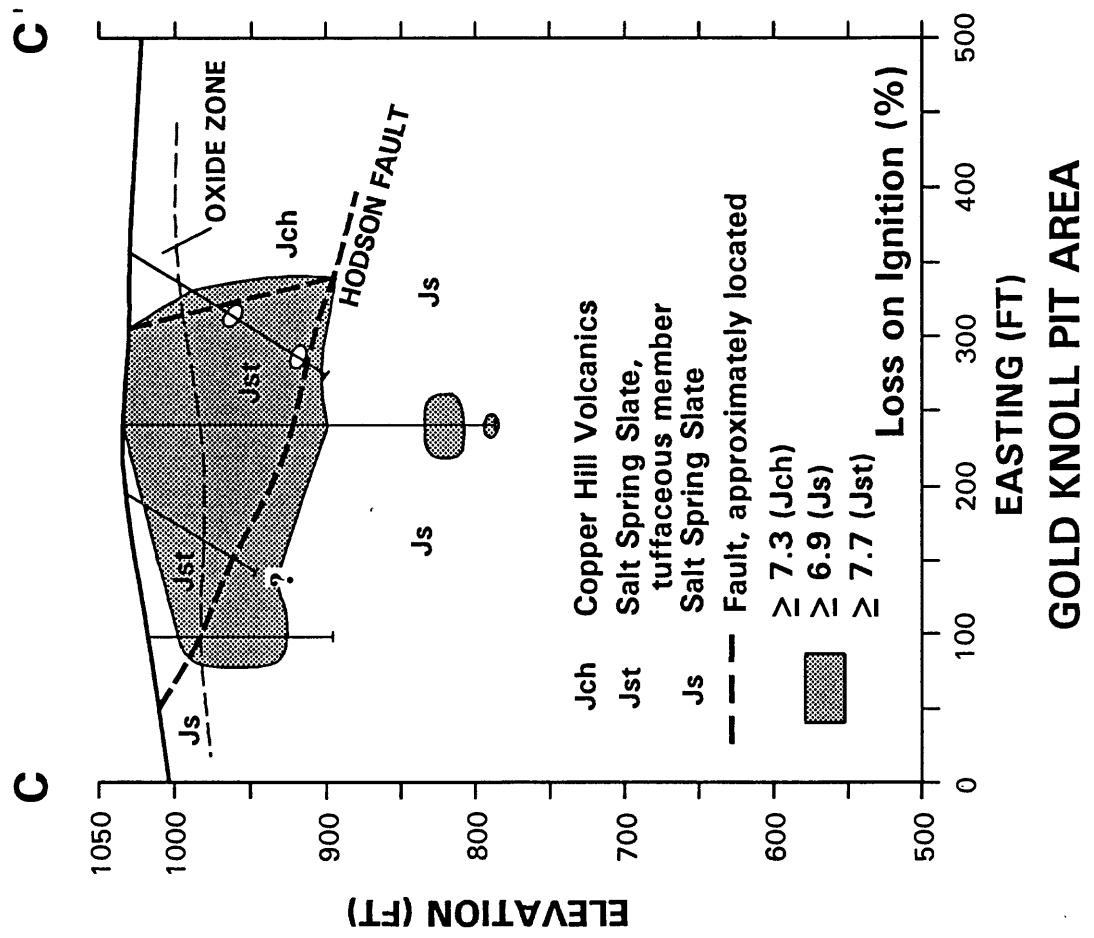


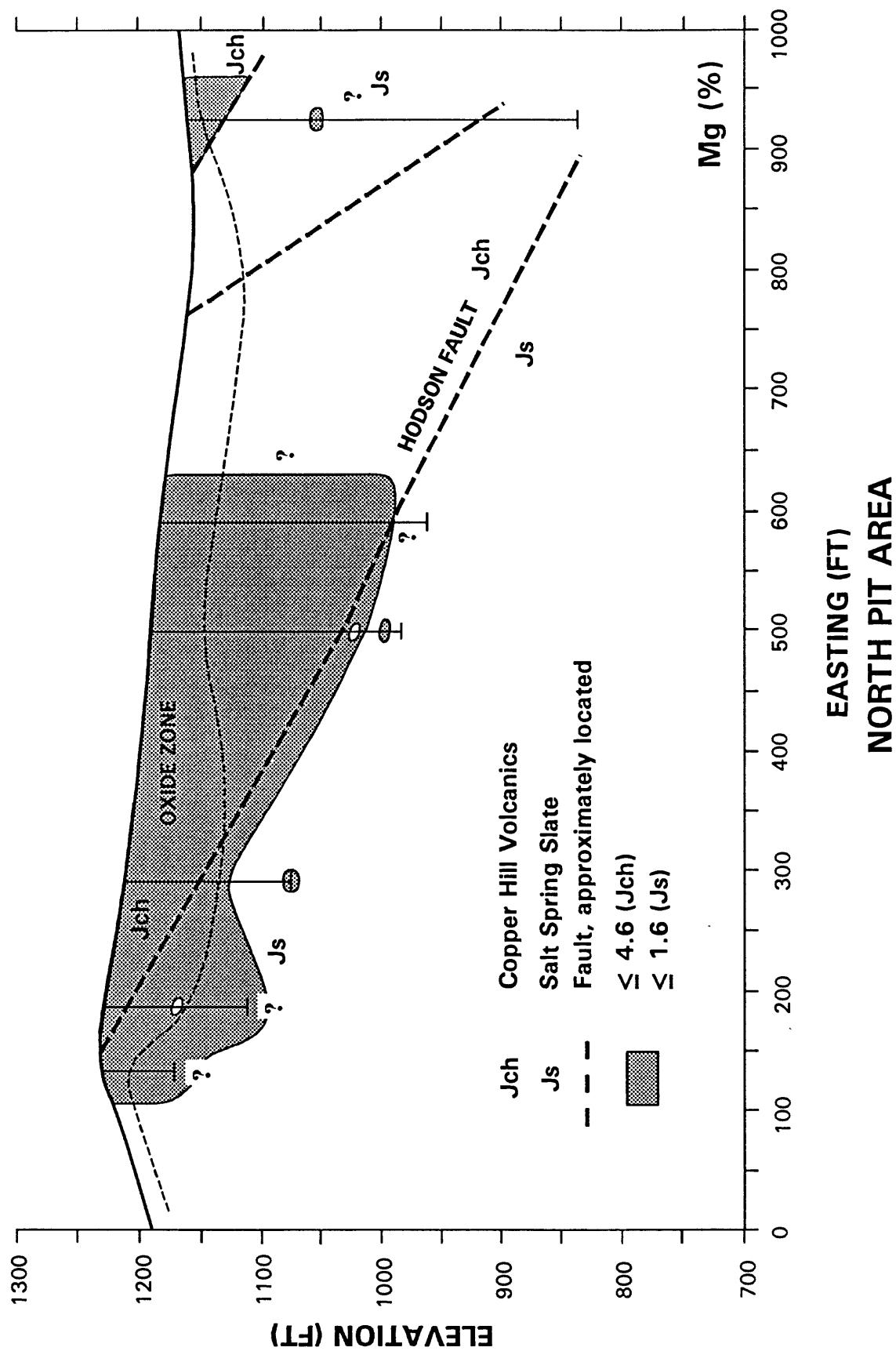
GOLD KNOLL PIT AREA



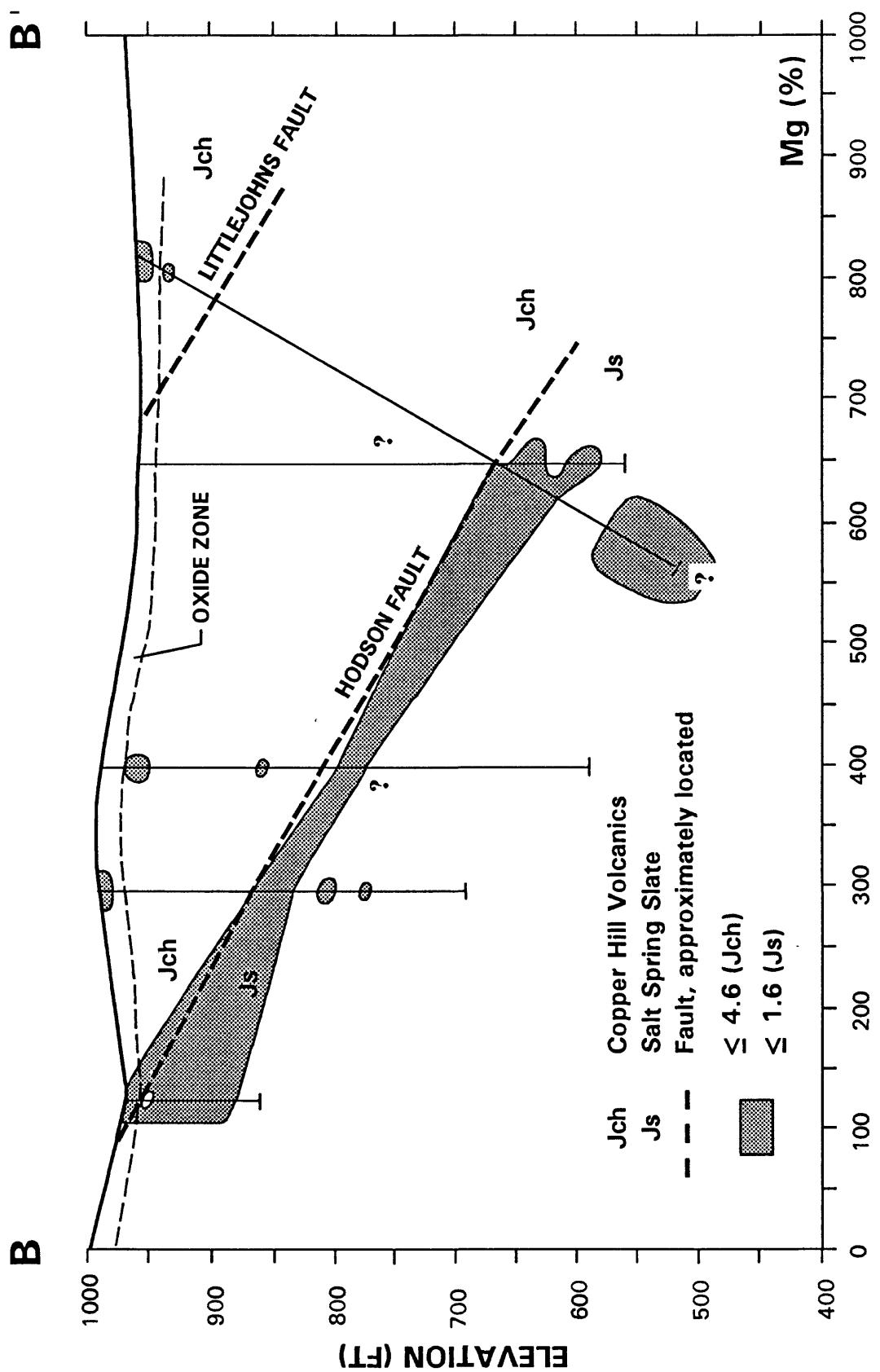
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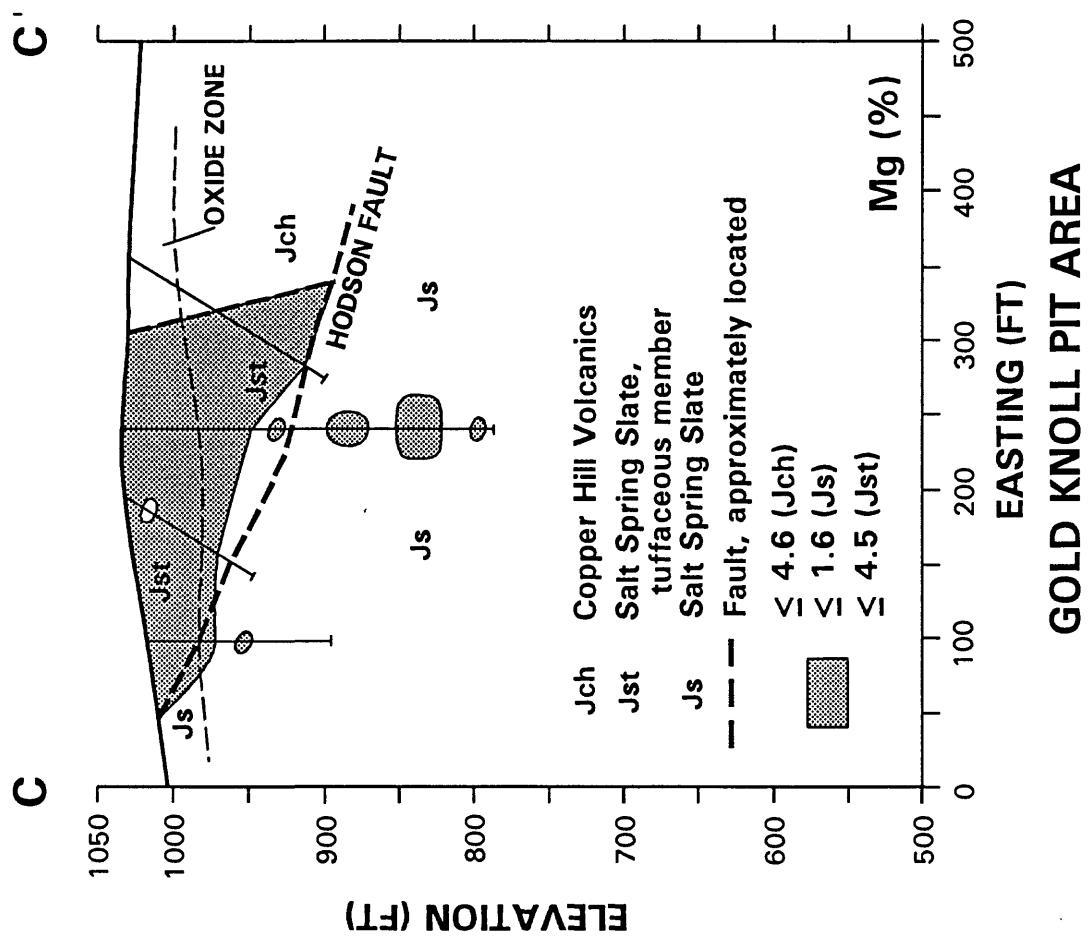


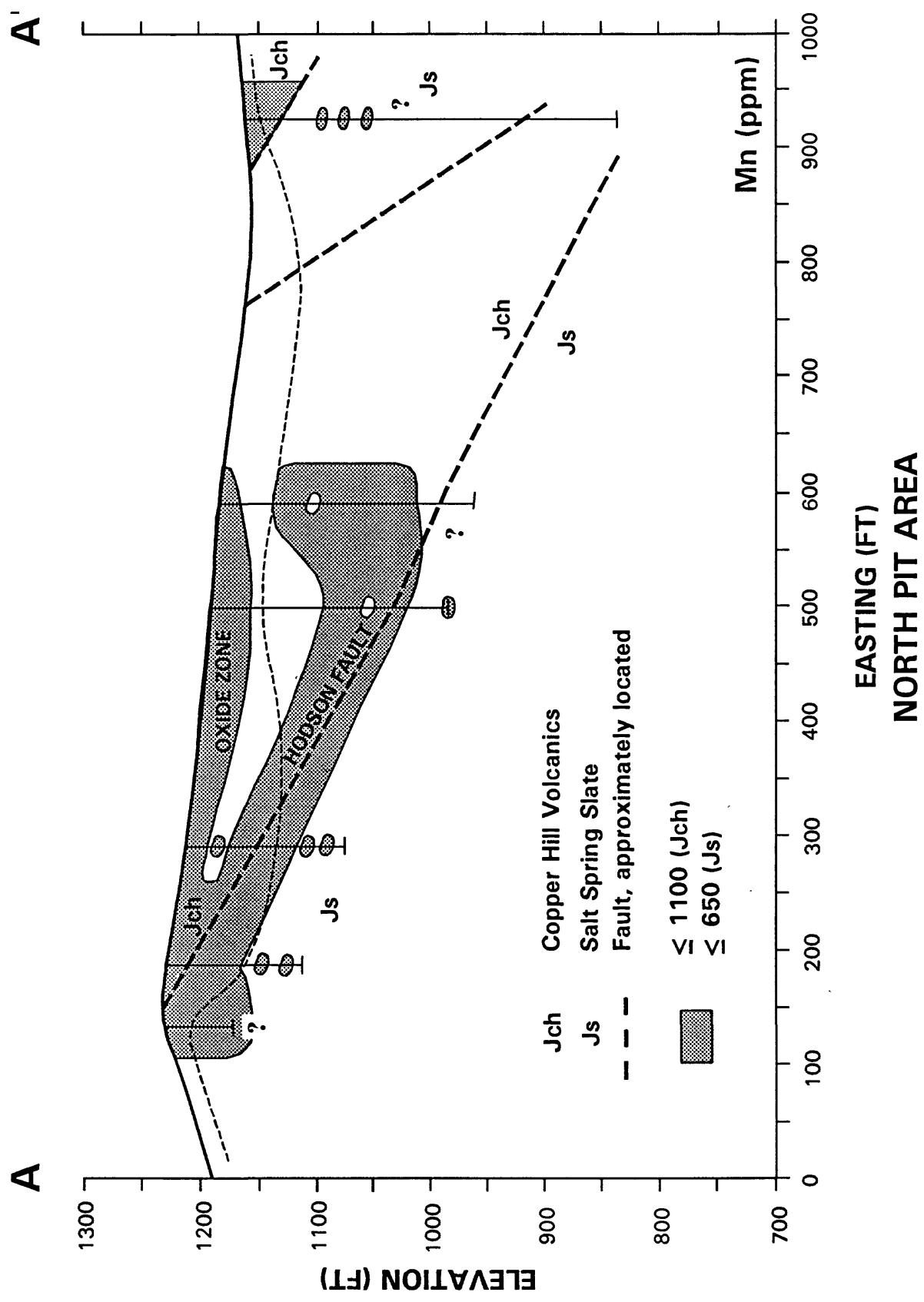


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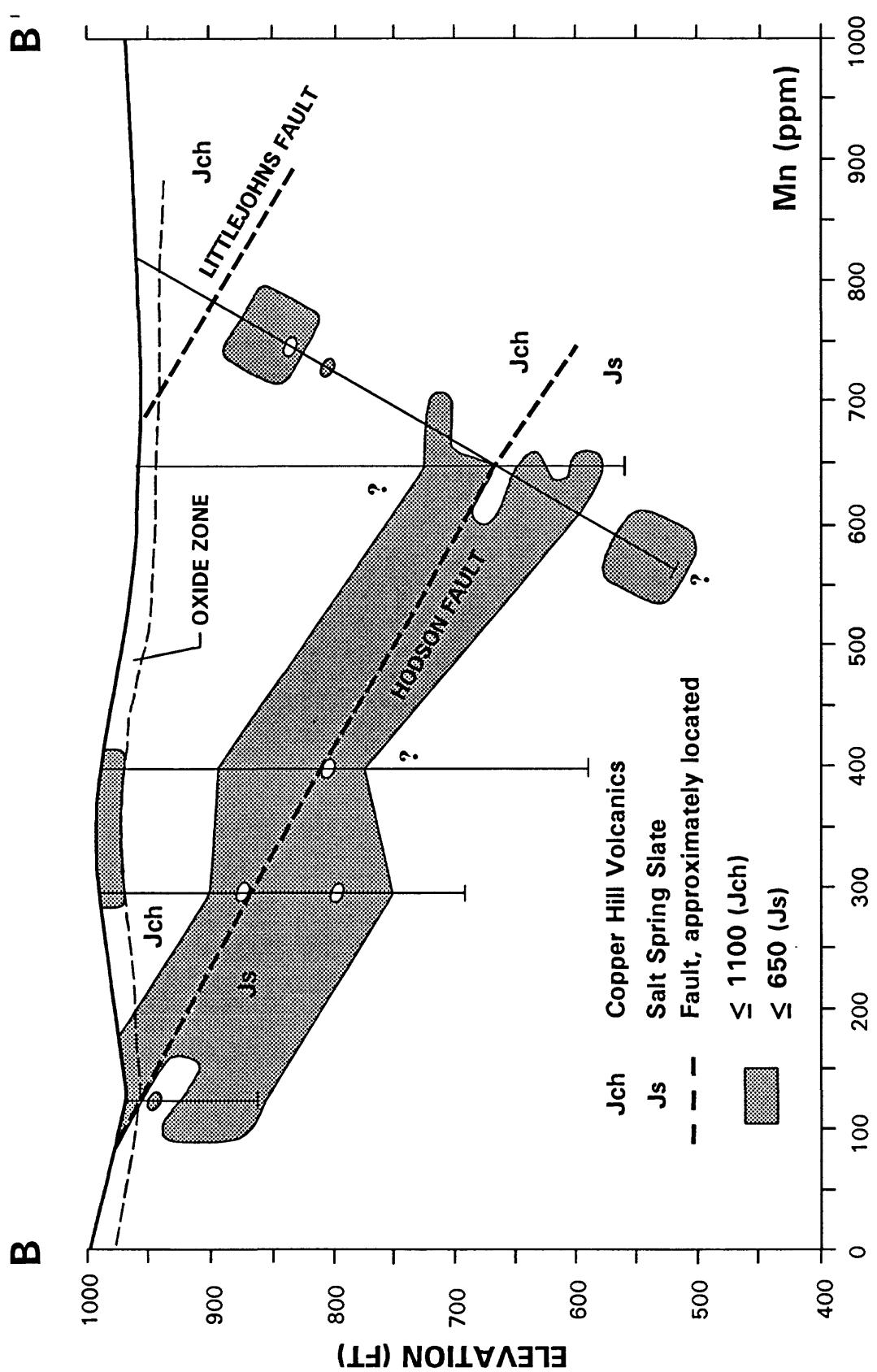
EASTING (FT)
SKYROCKET PIT AREA

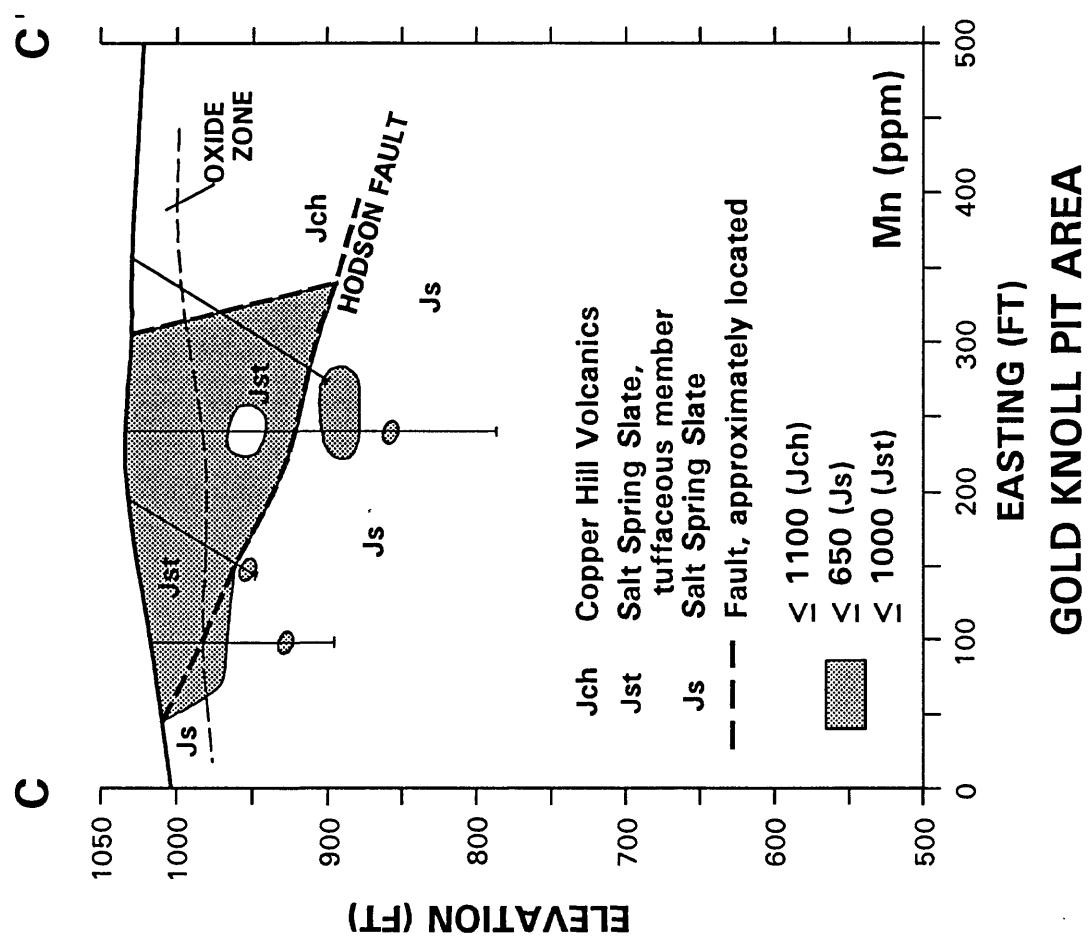






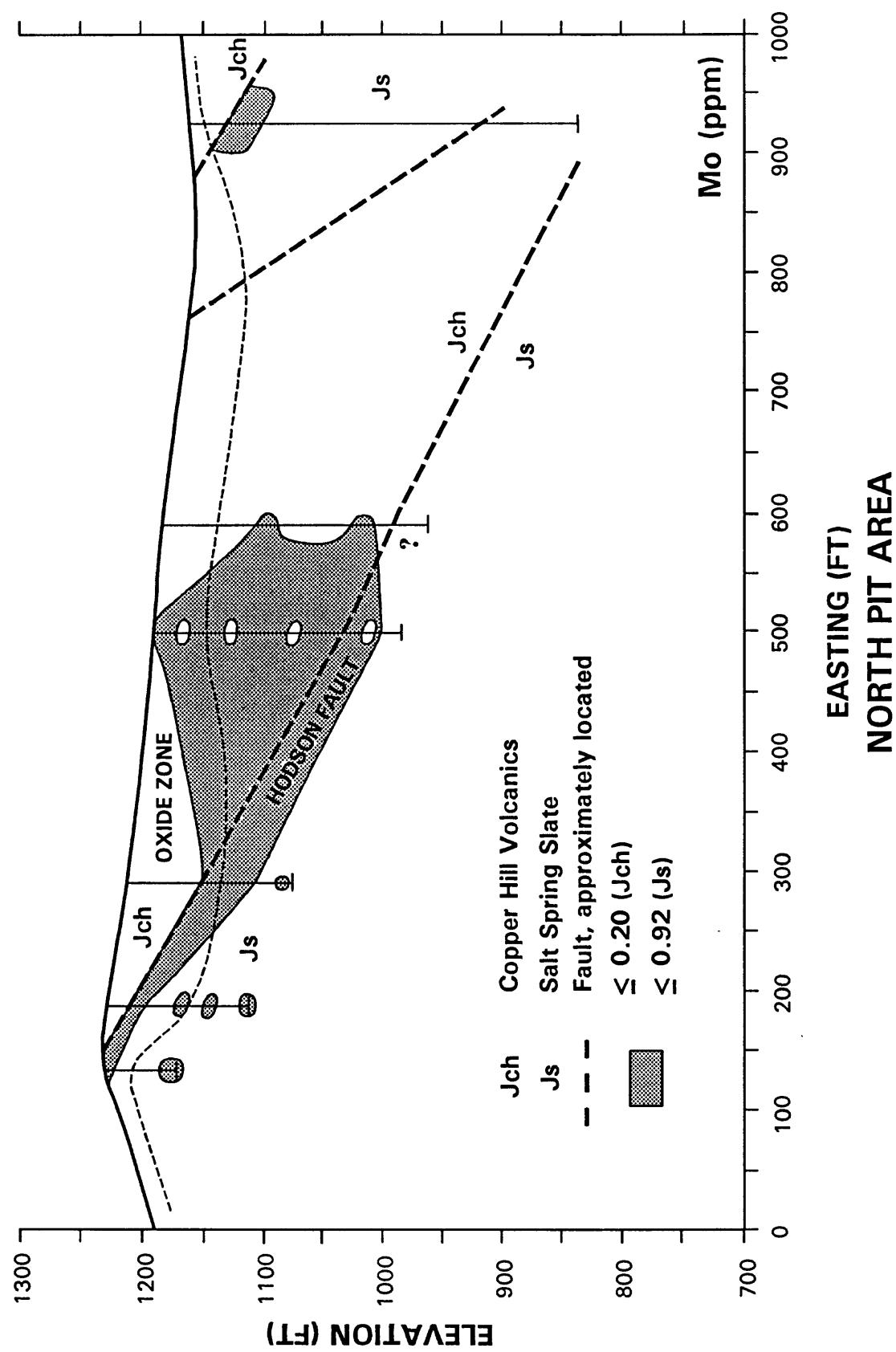
EASTING (FT)
SKYROCKET PIT AREA



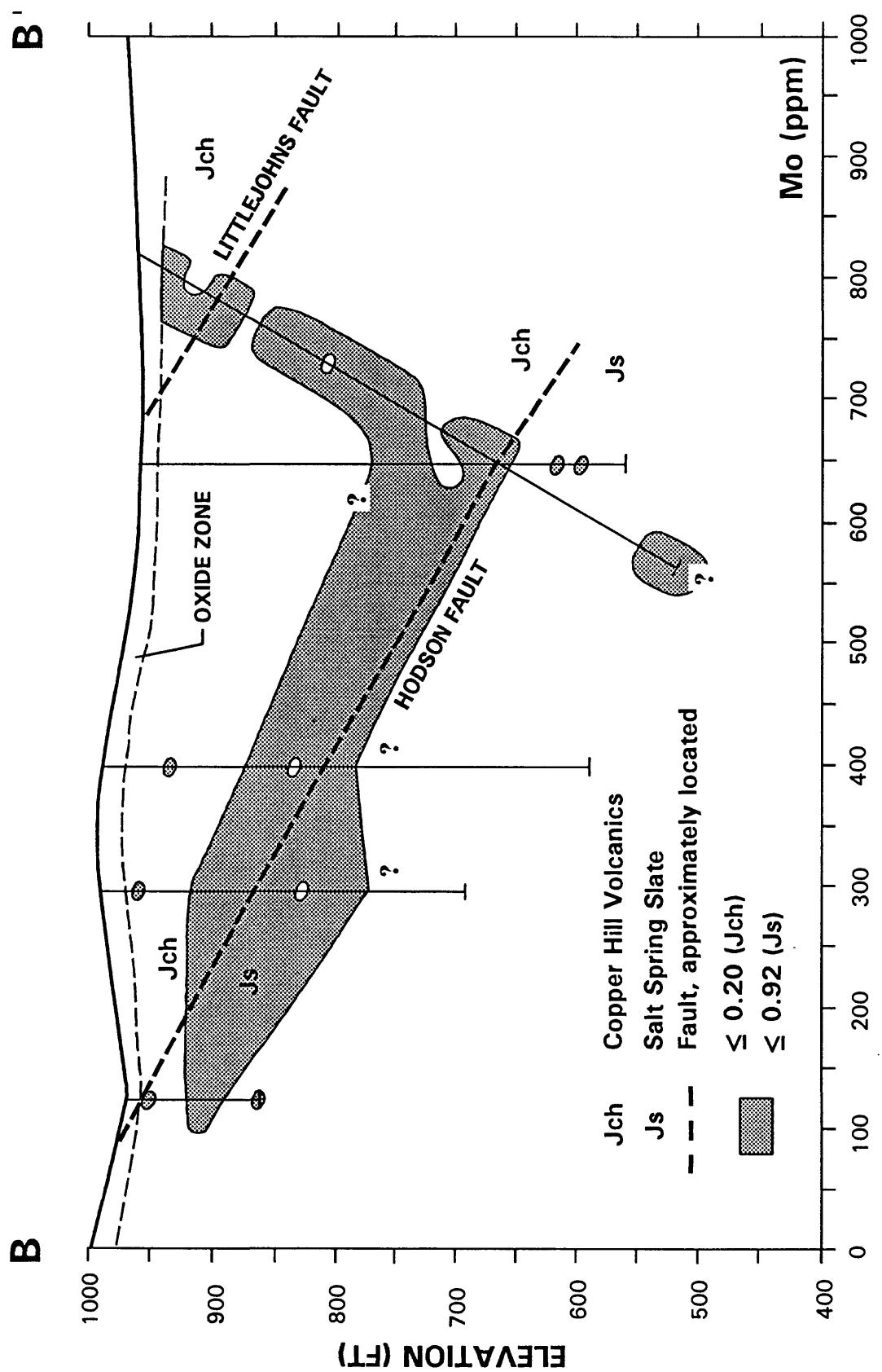


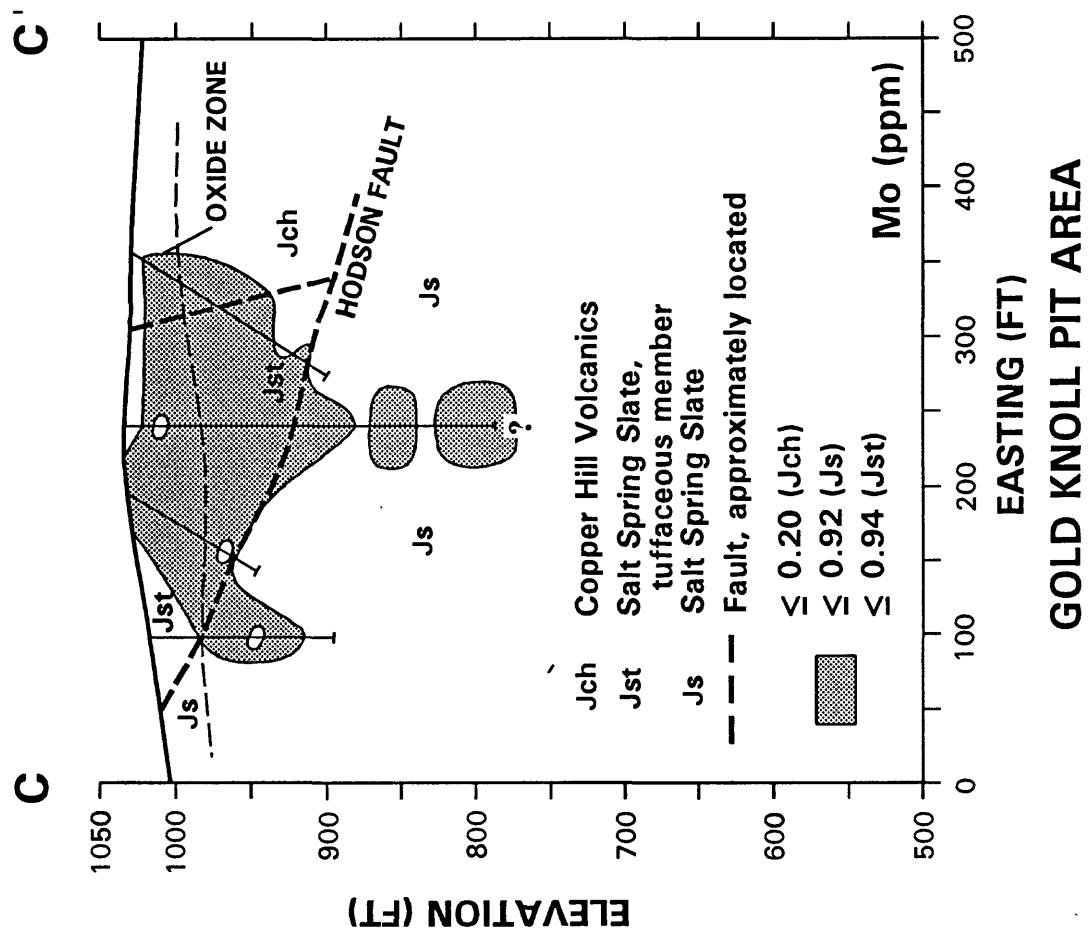
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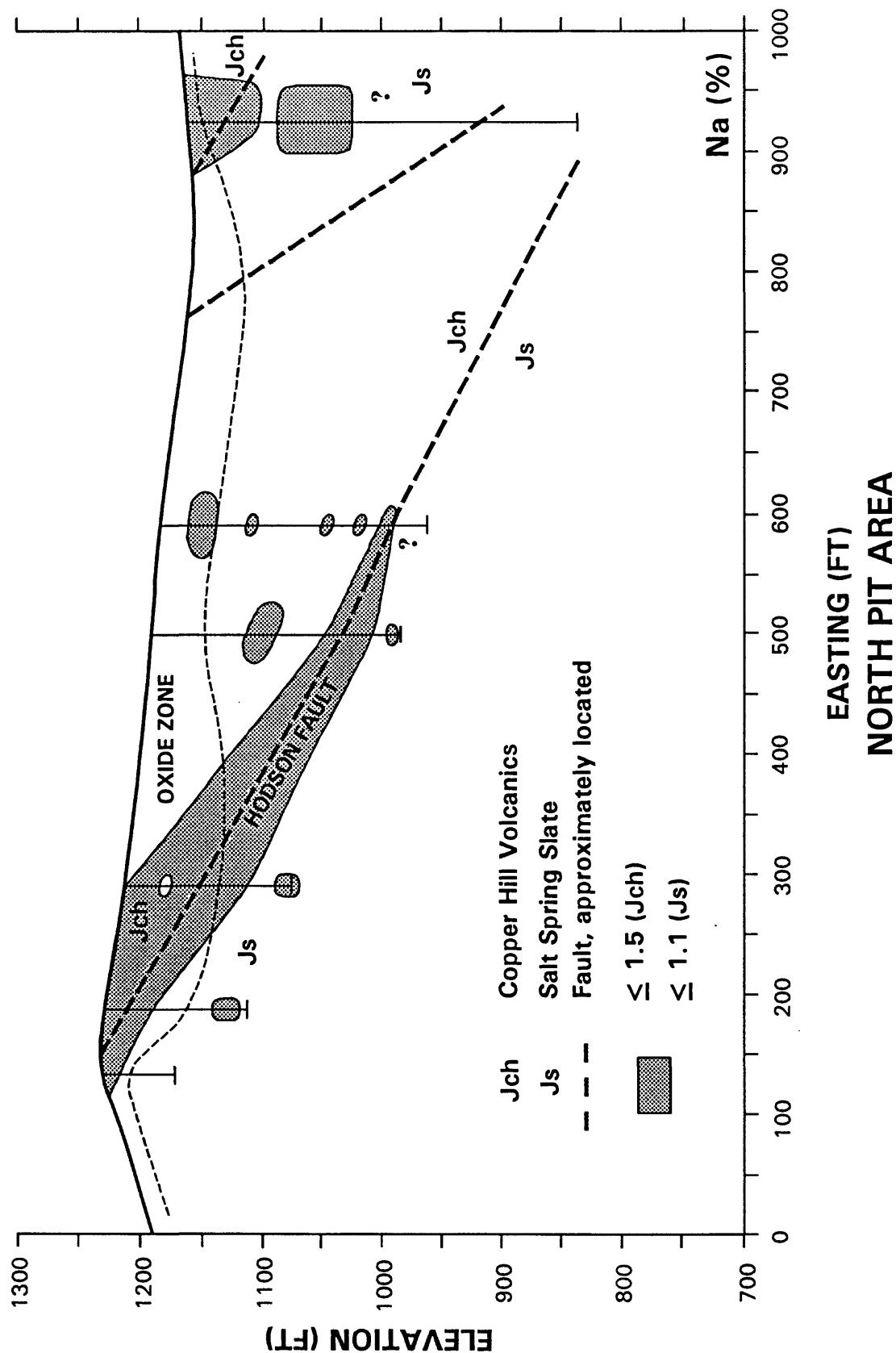
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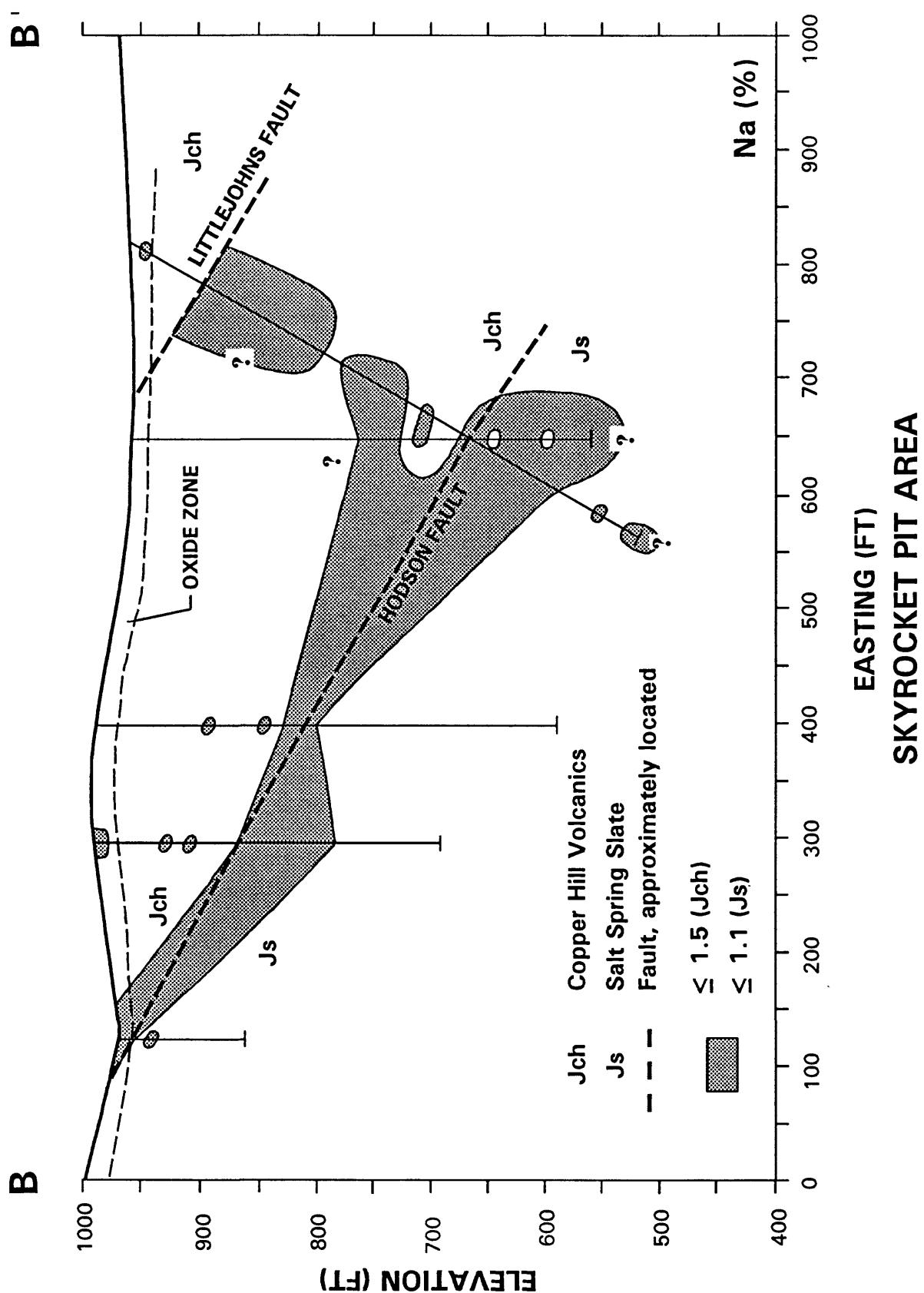


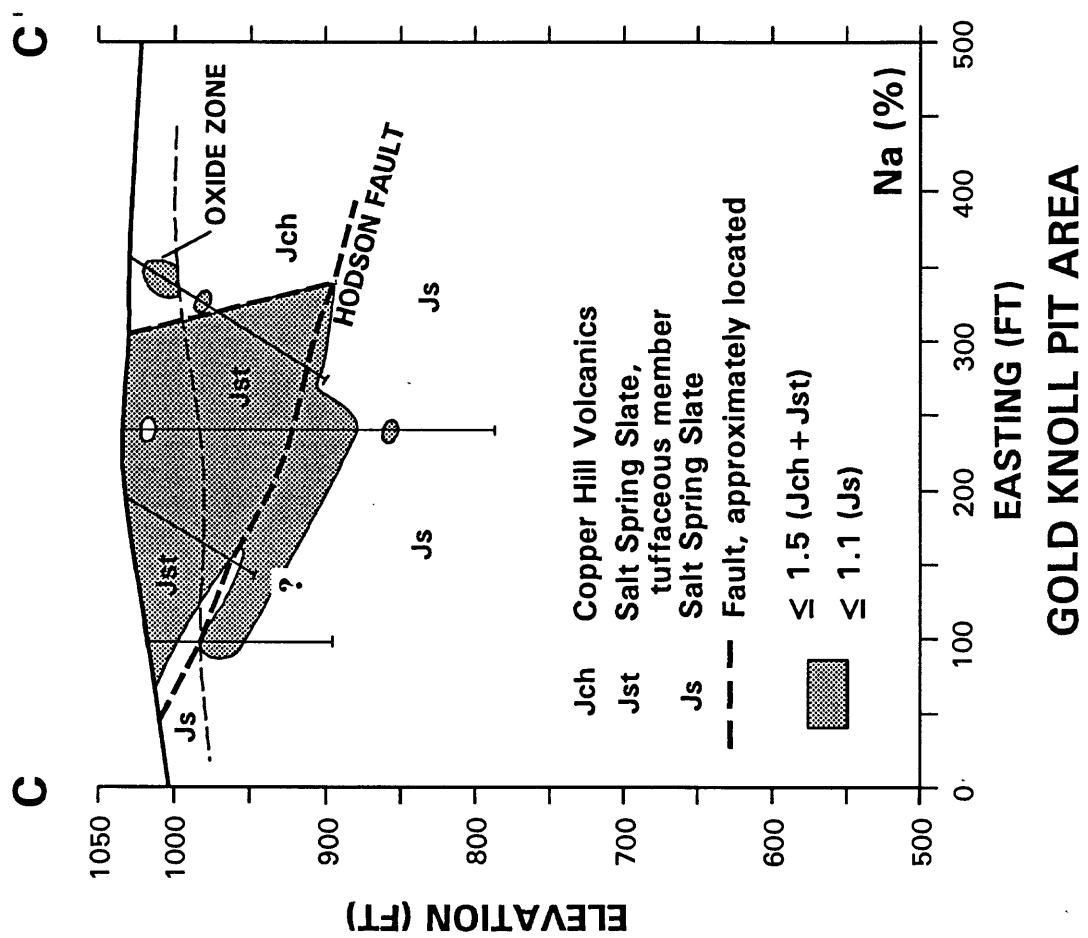
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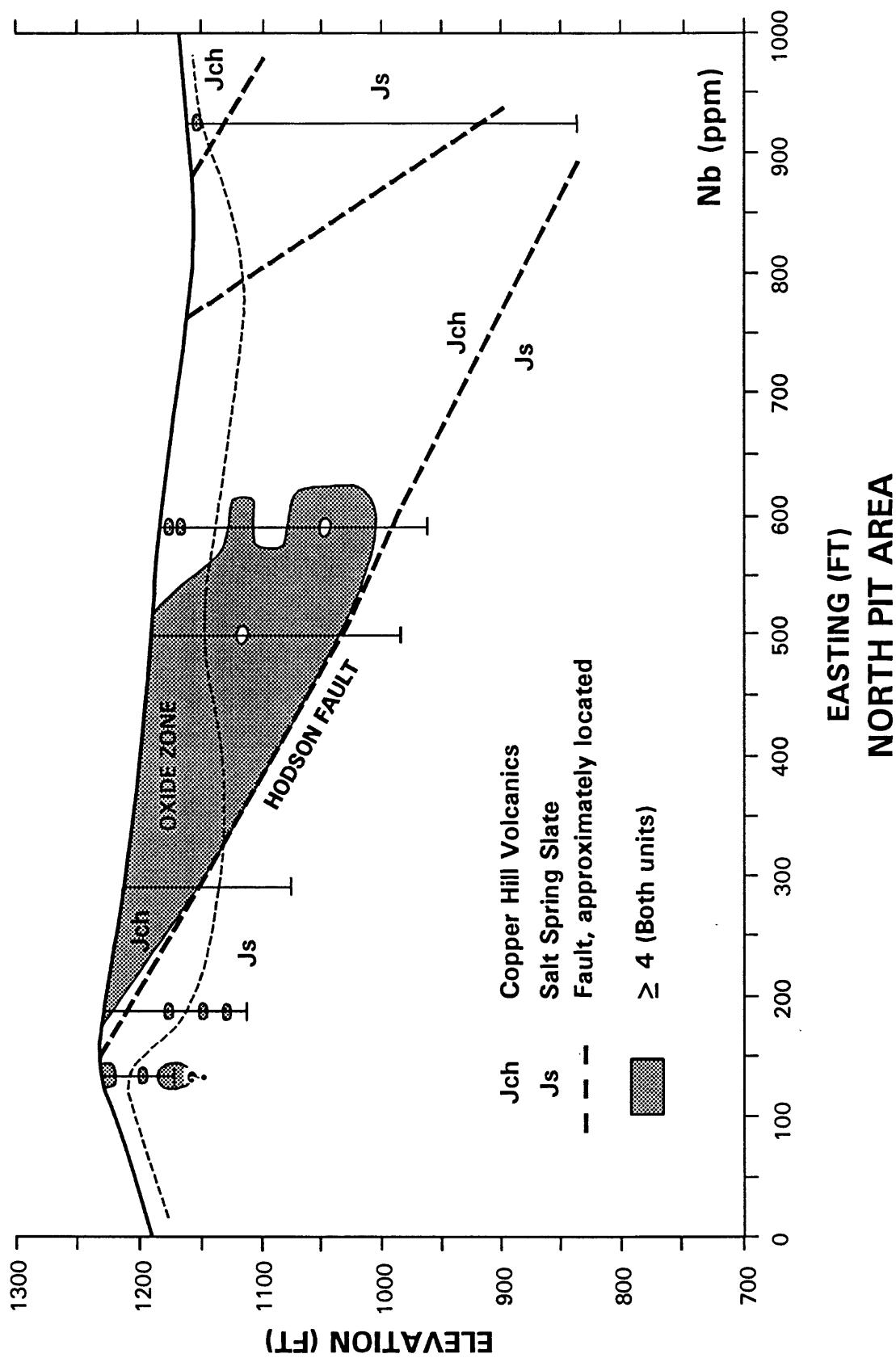


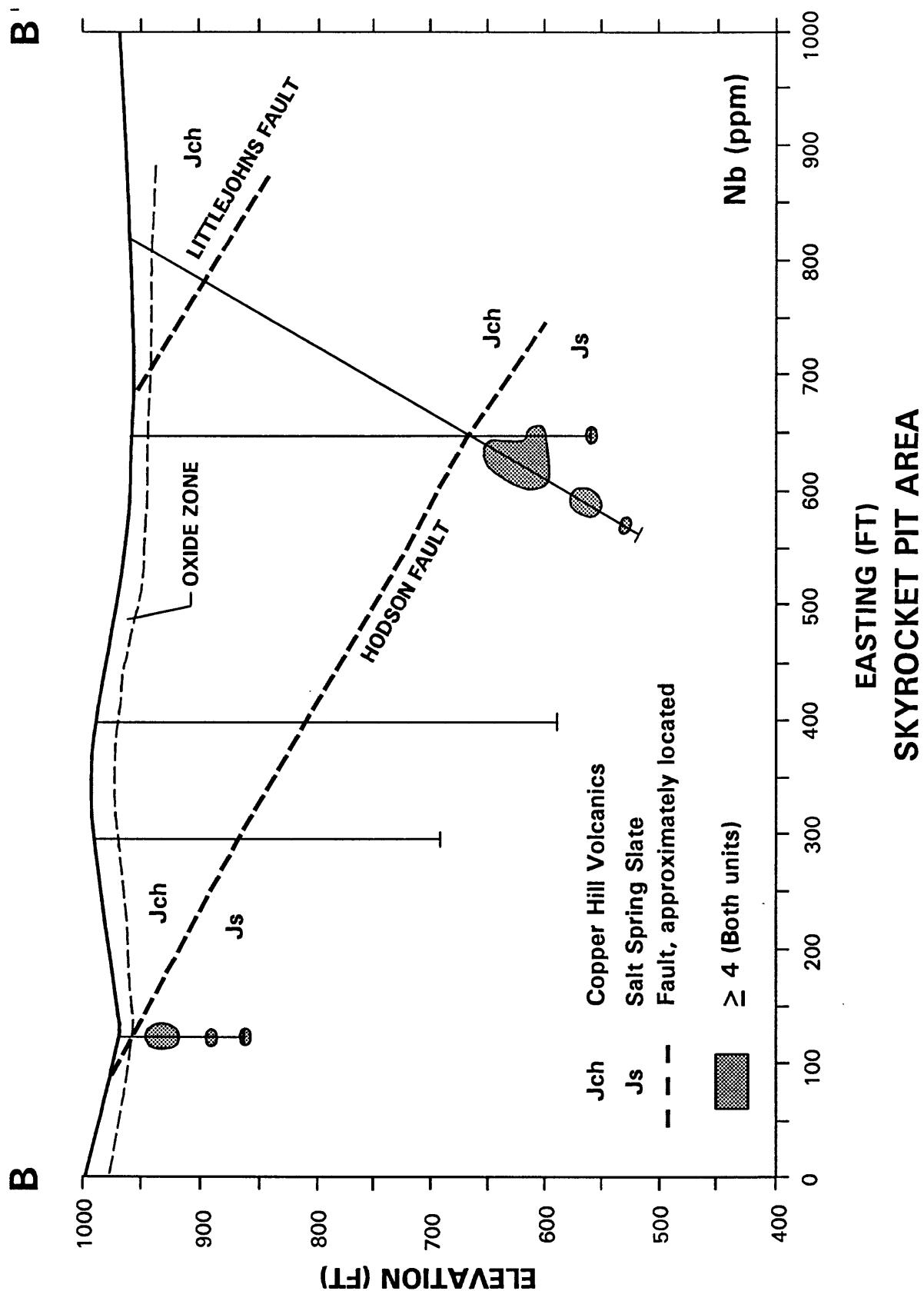


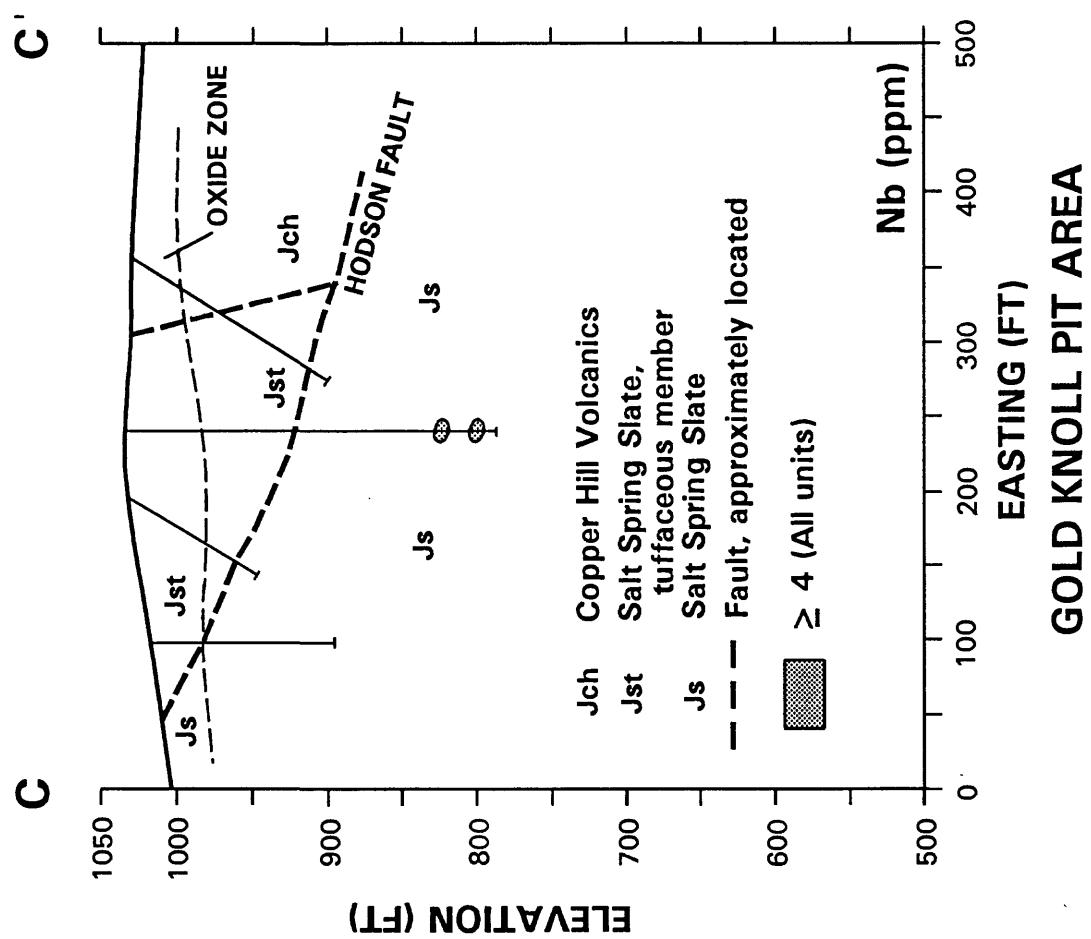
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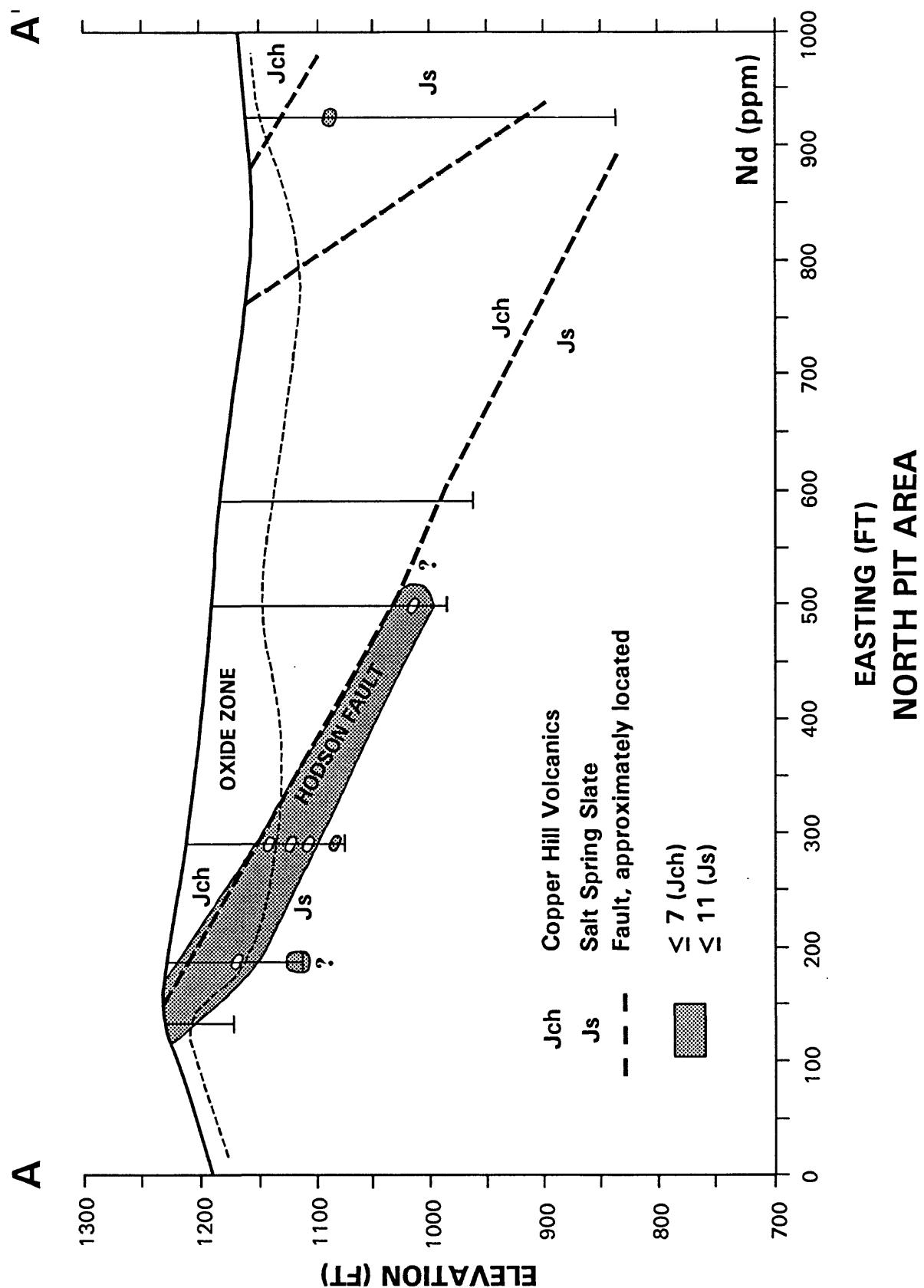


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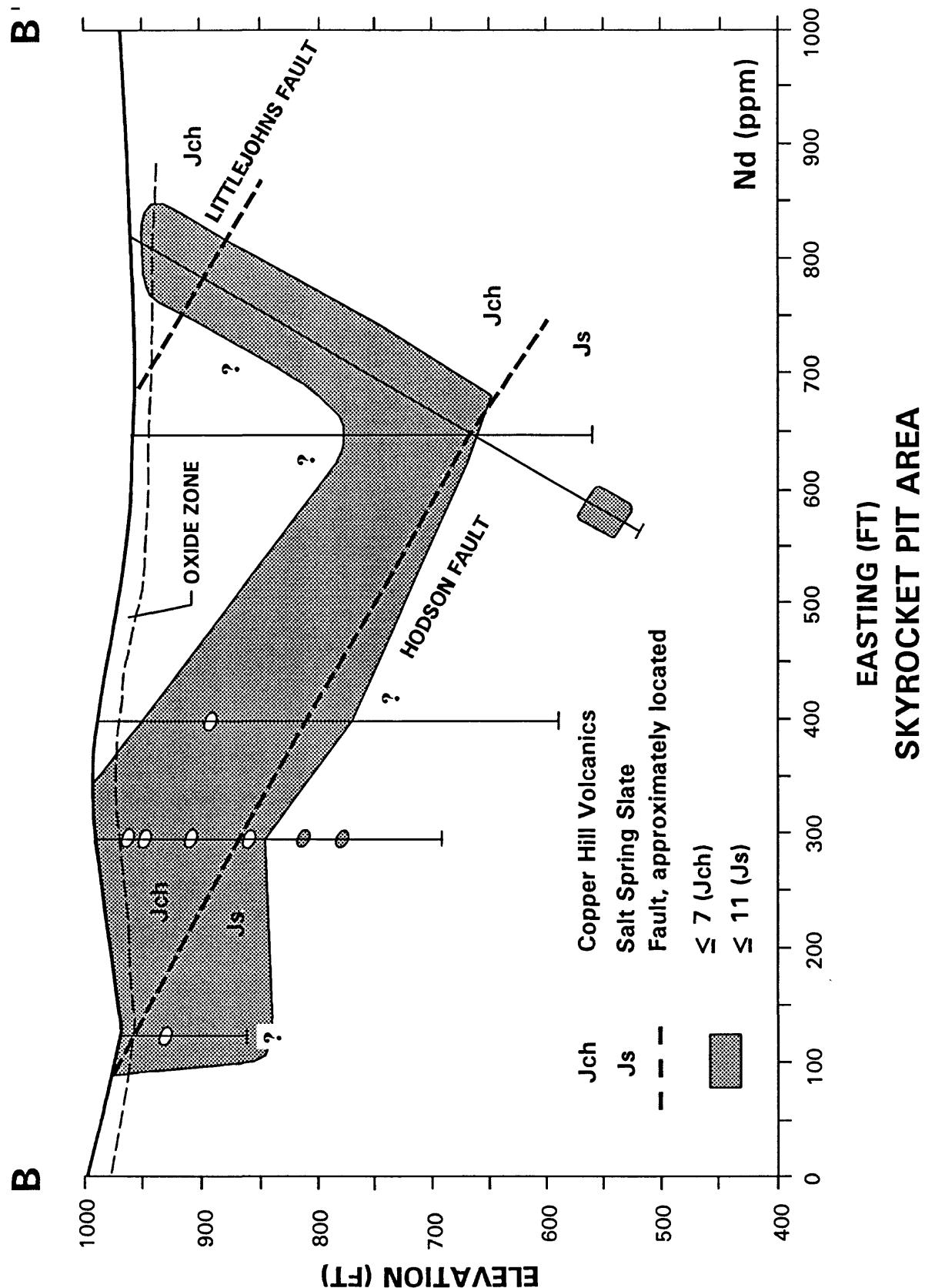


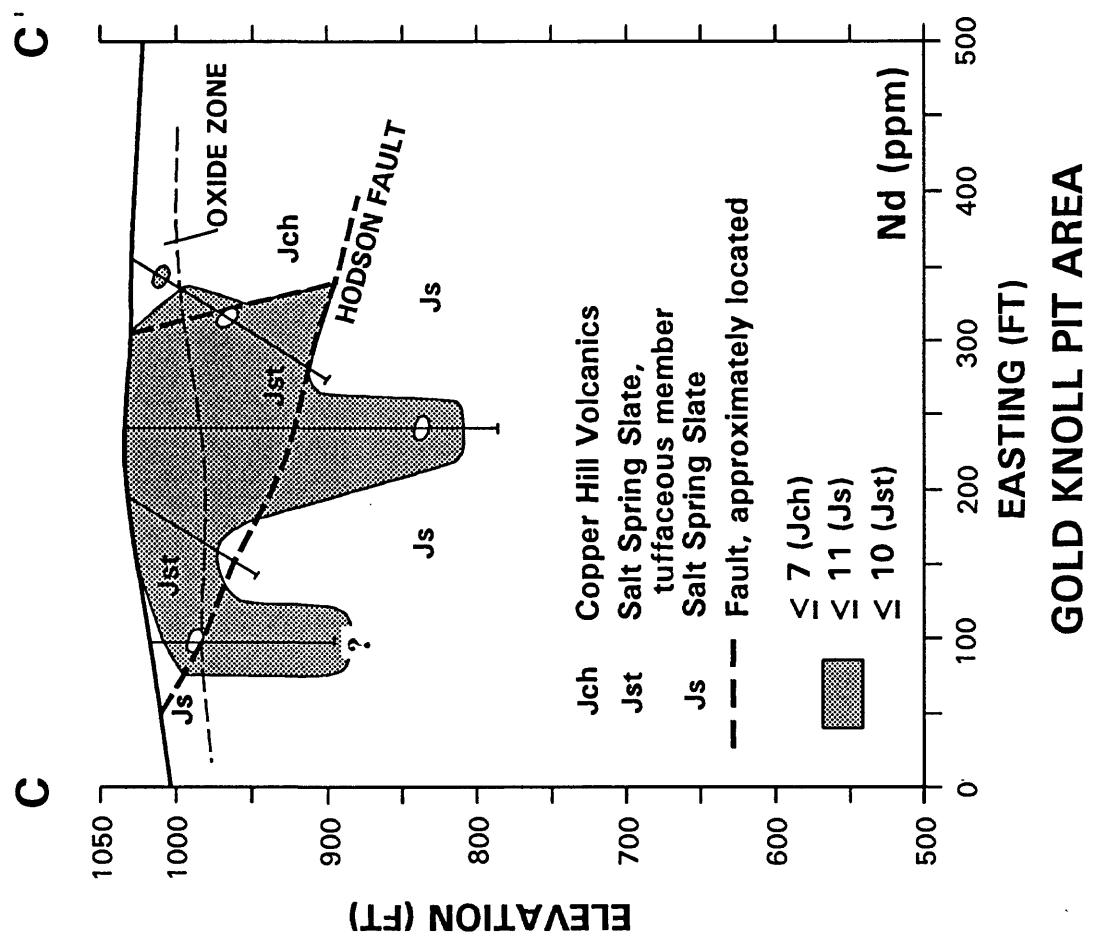


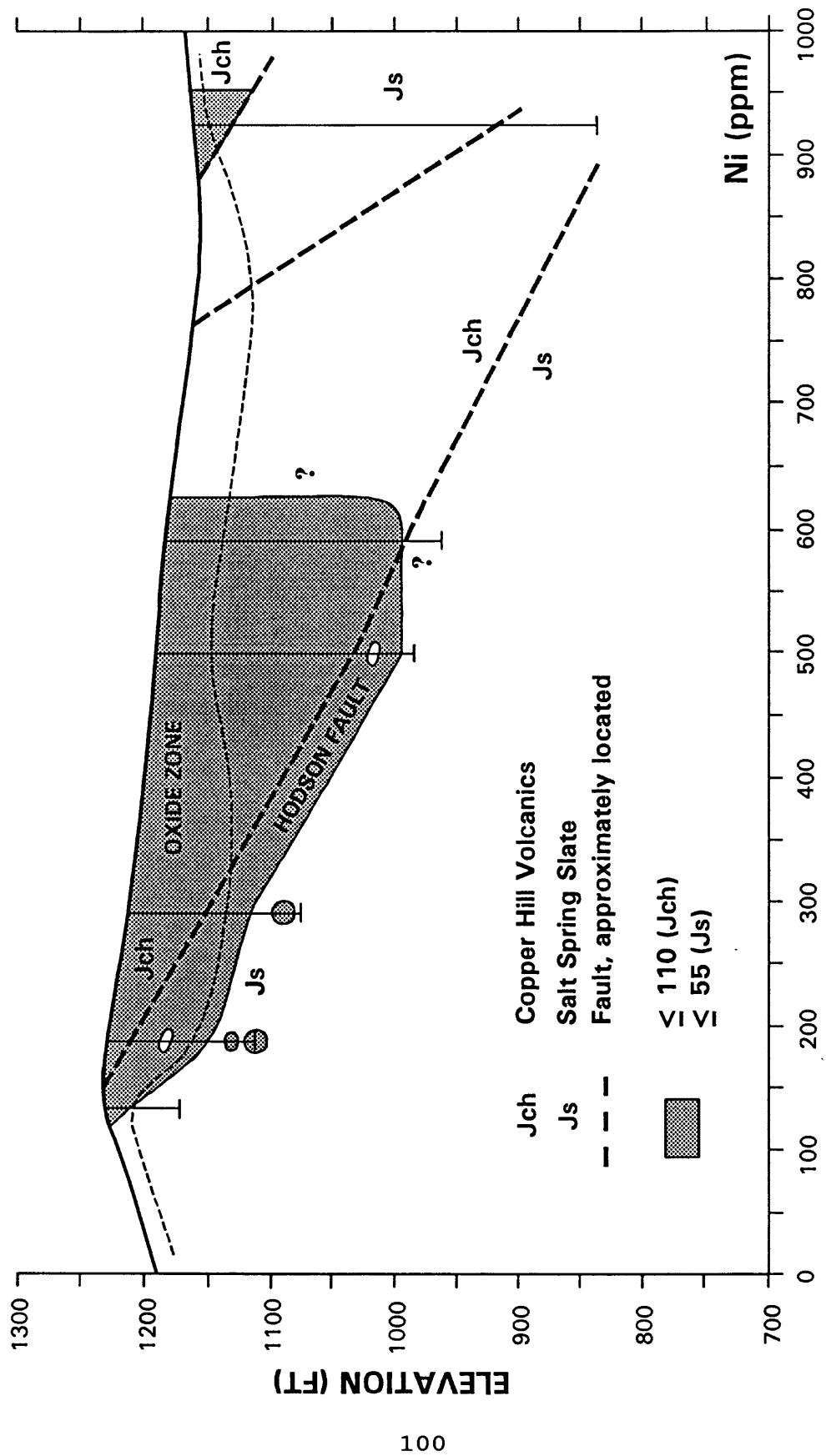
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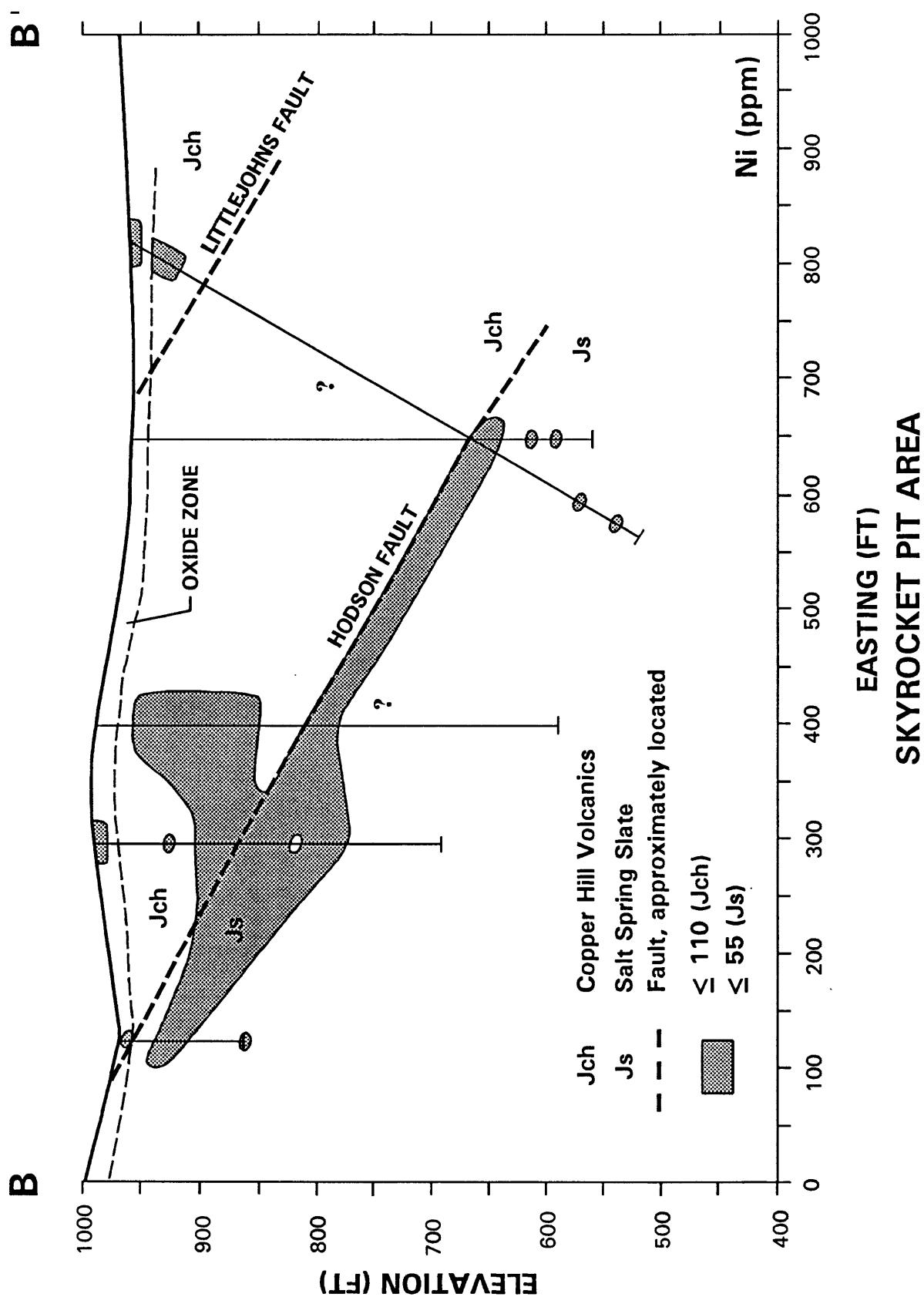
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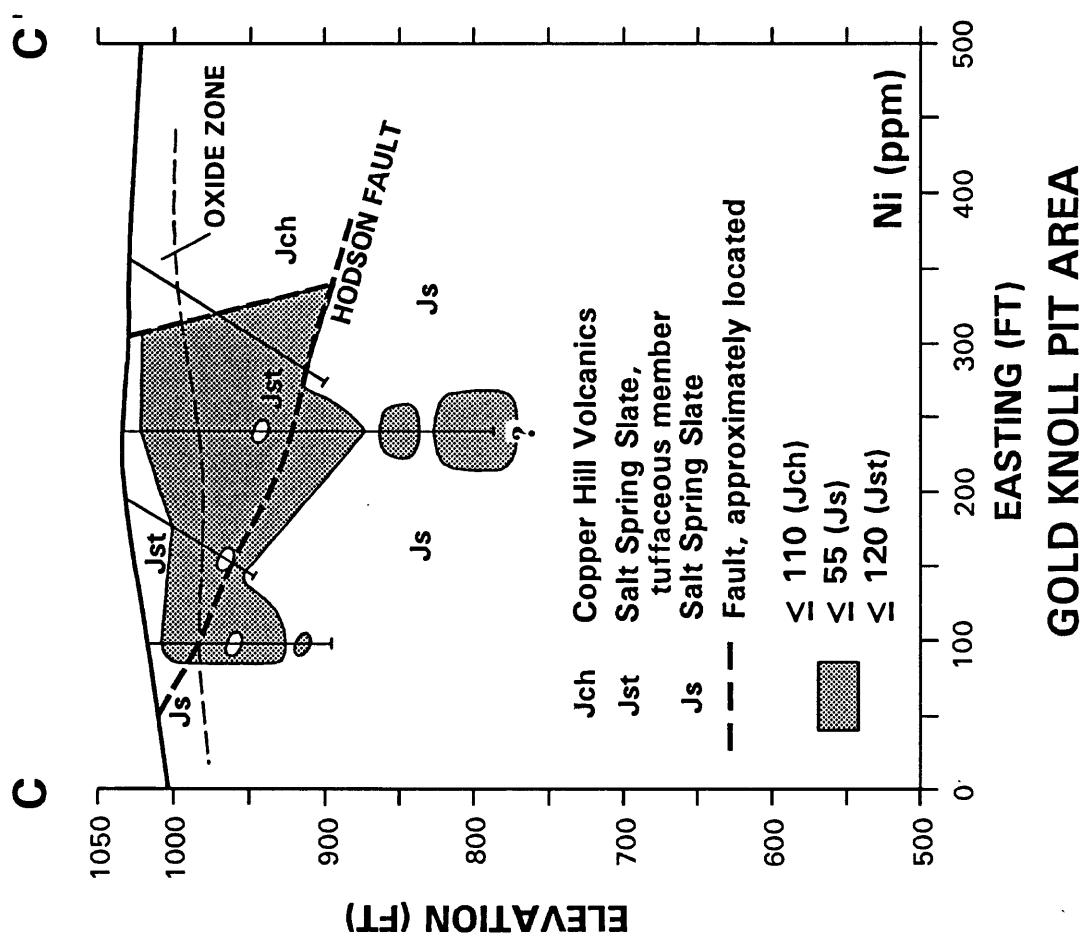




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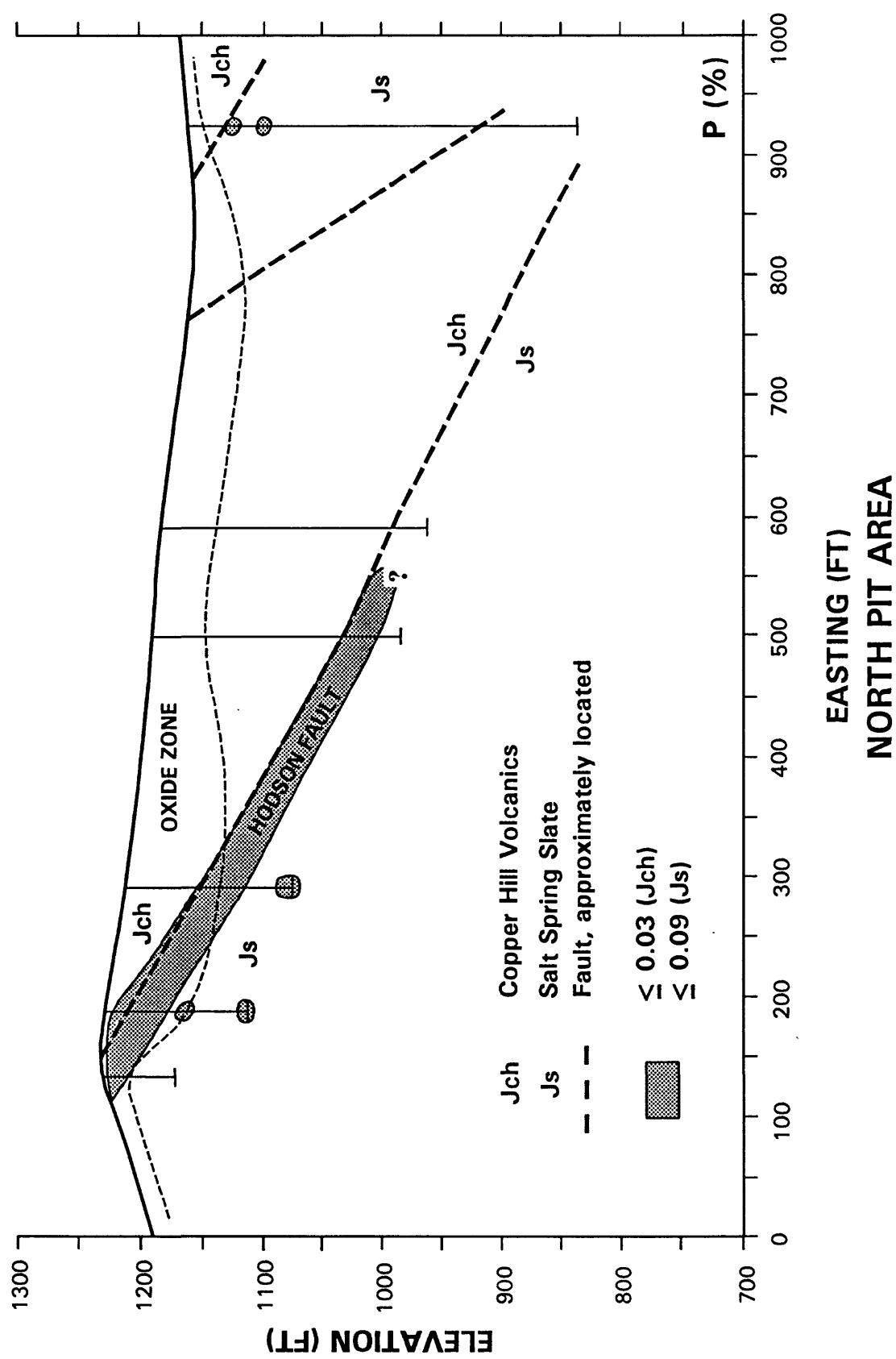
EASTING (FT)
NORTH PIT AREA

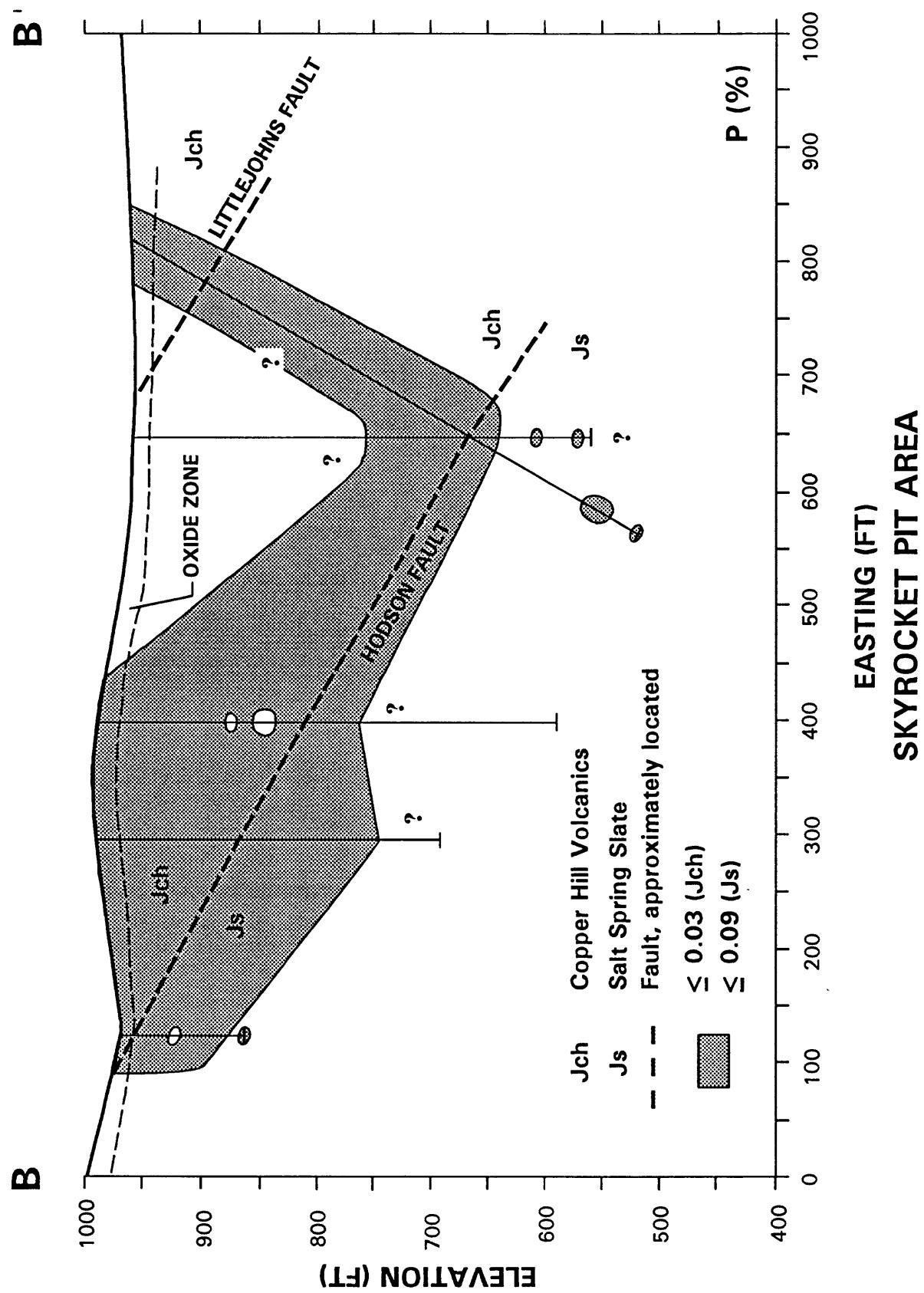


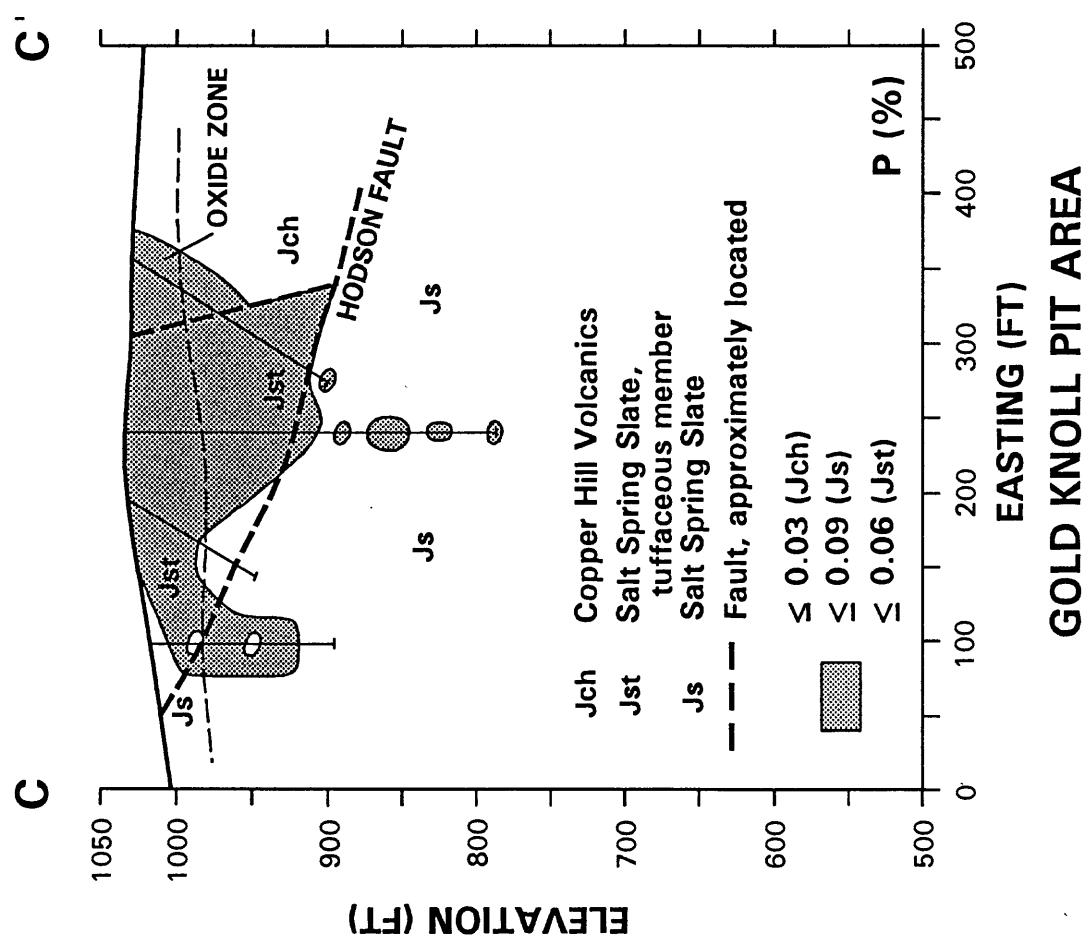


A

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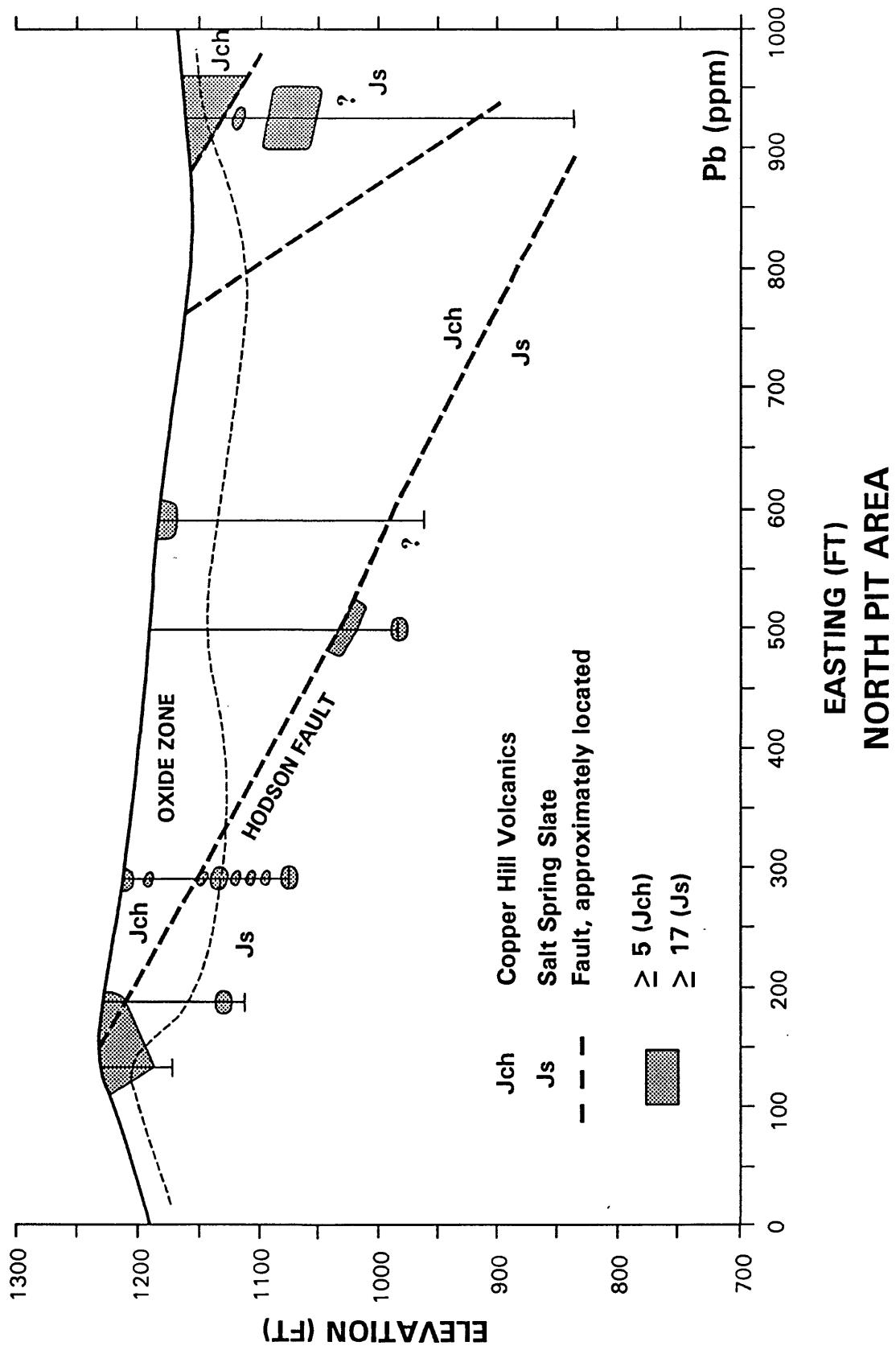




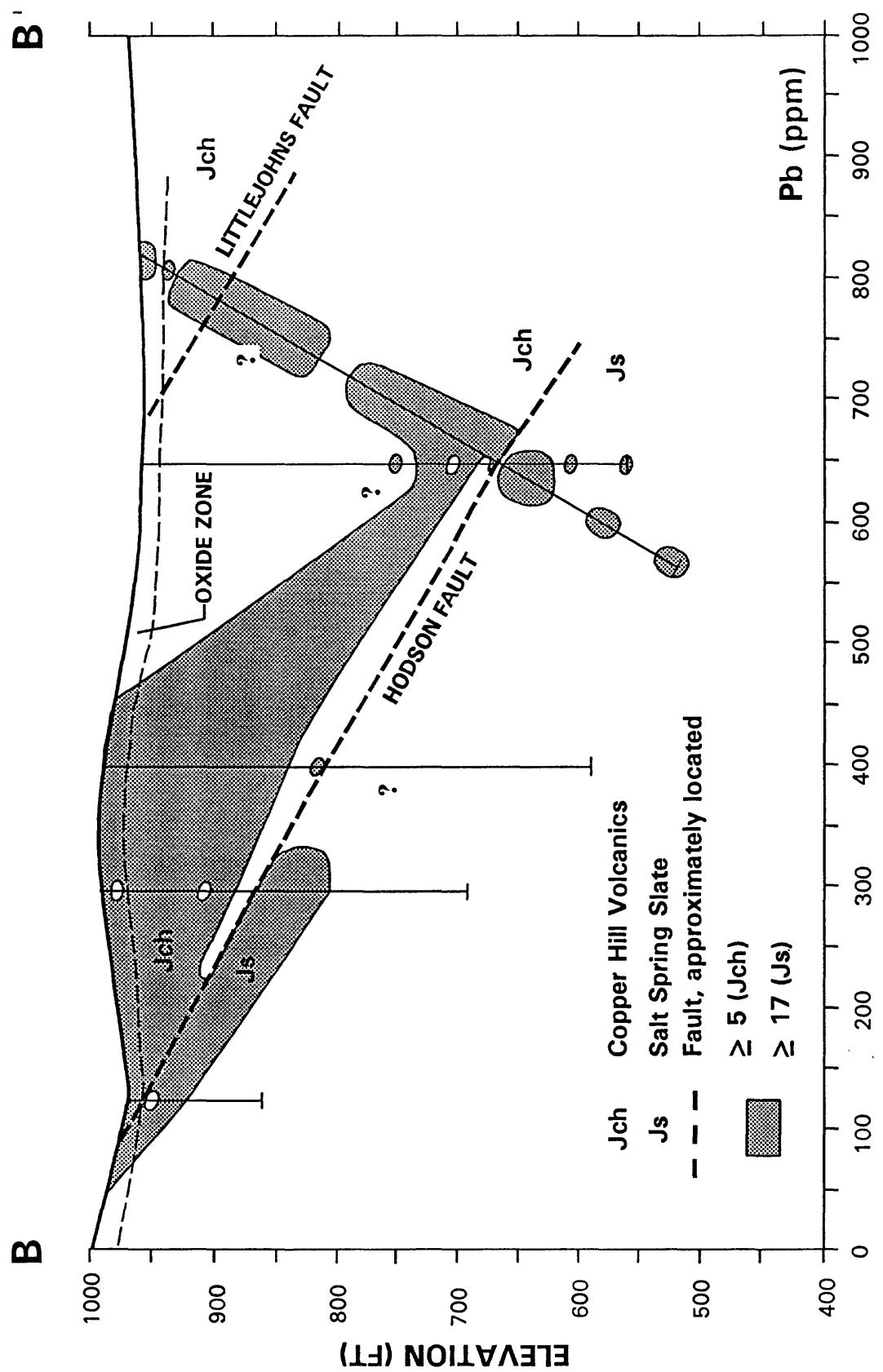


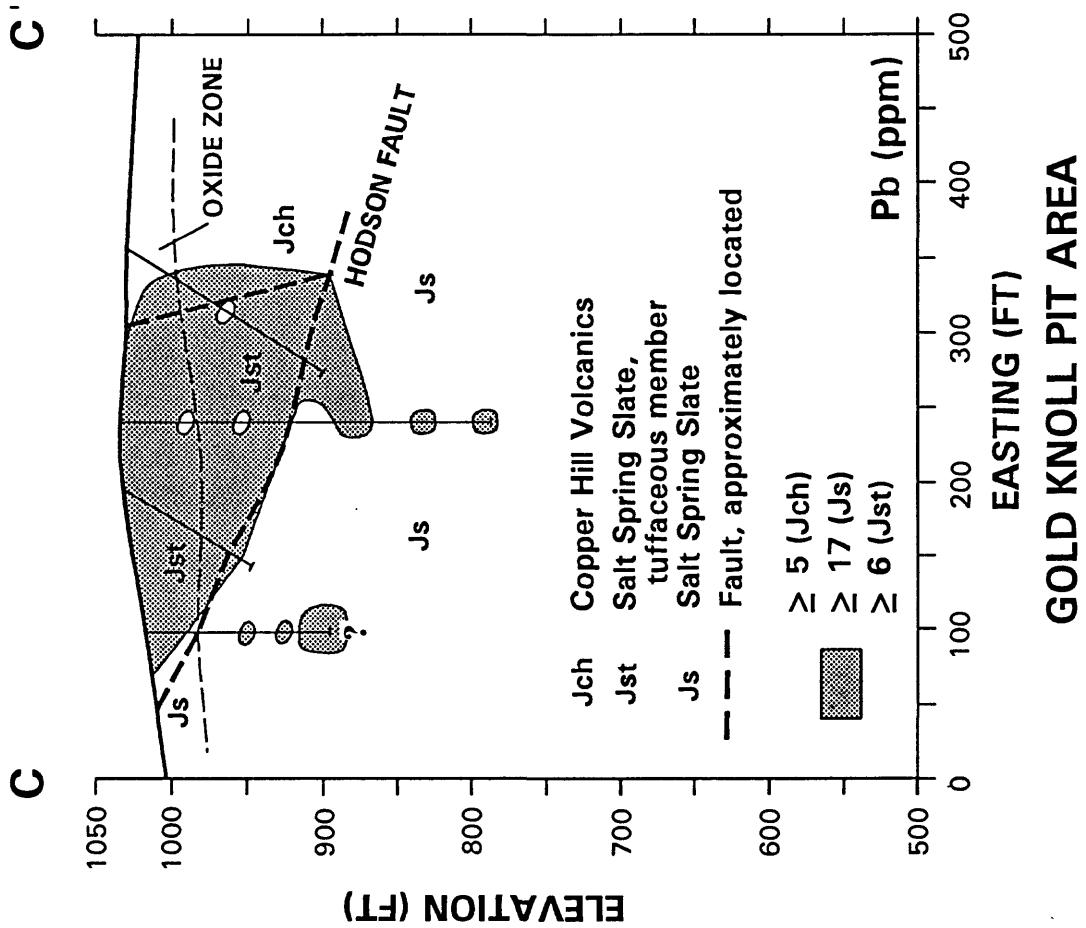
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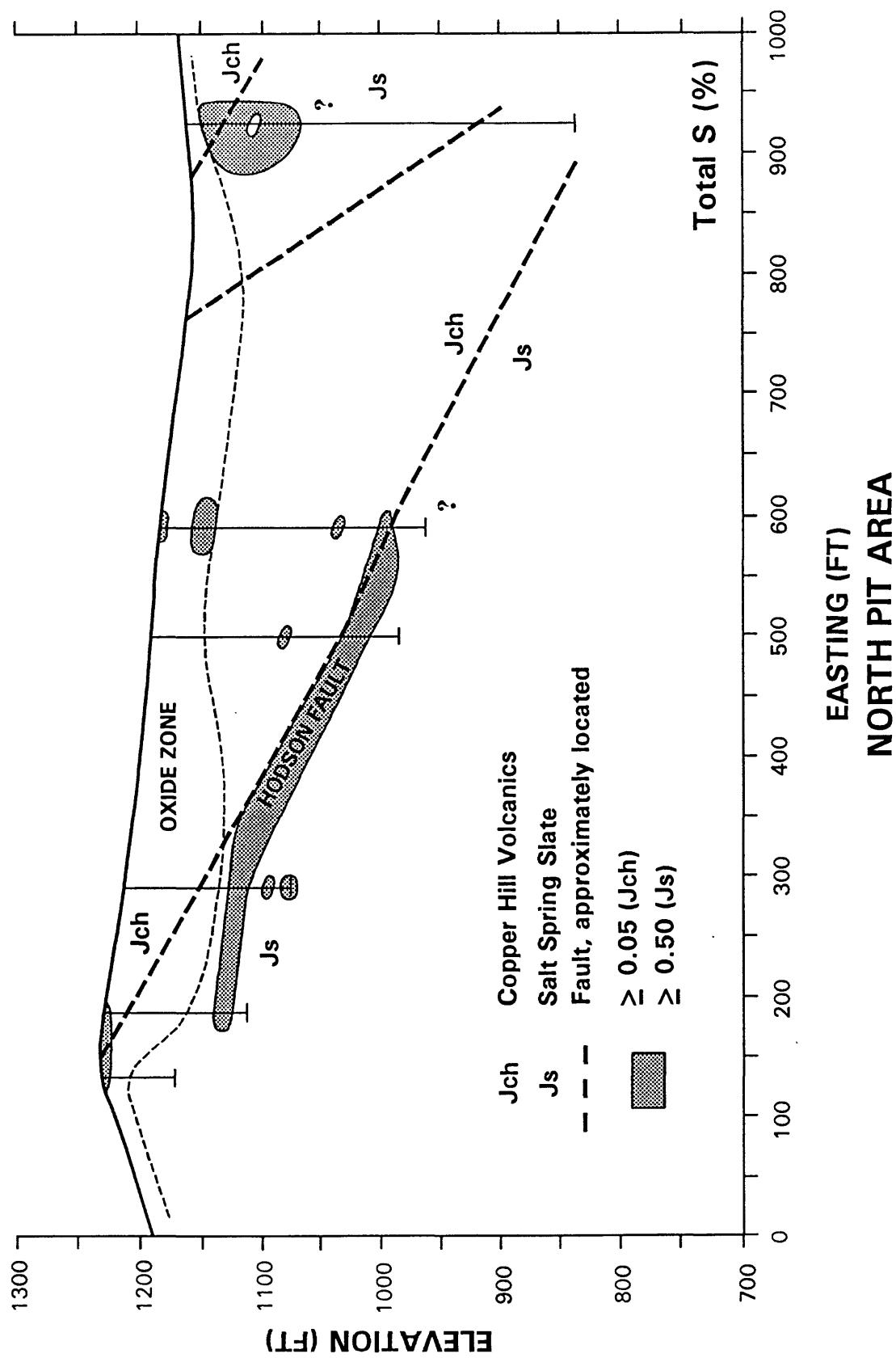
SKYROCKET PIT AREA



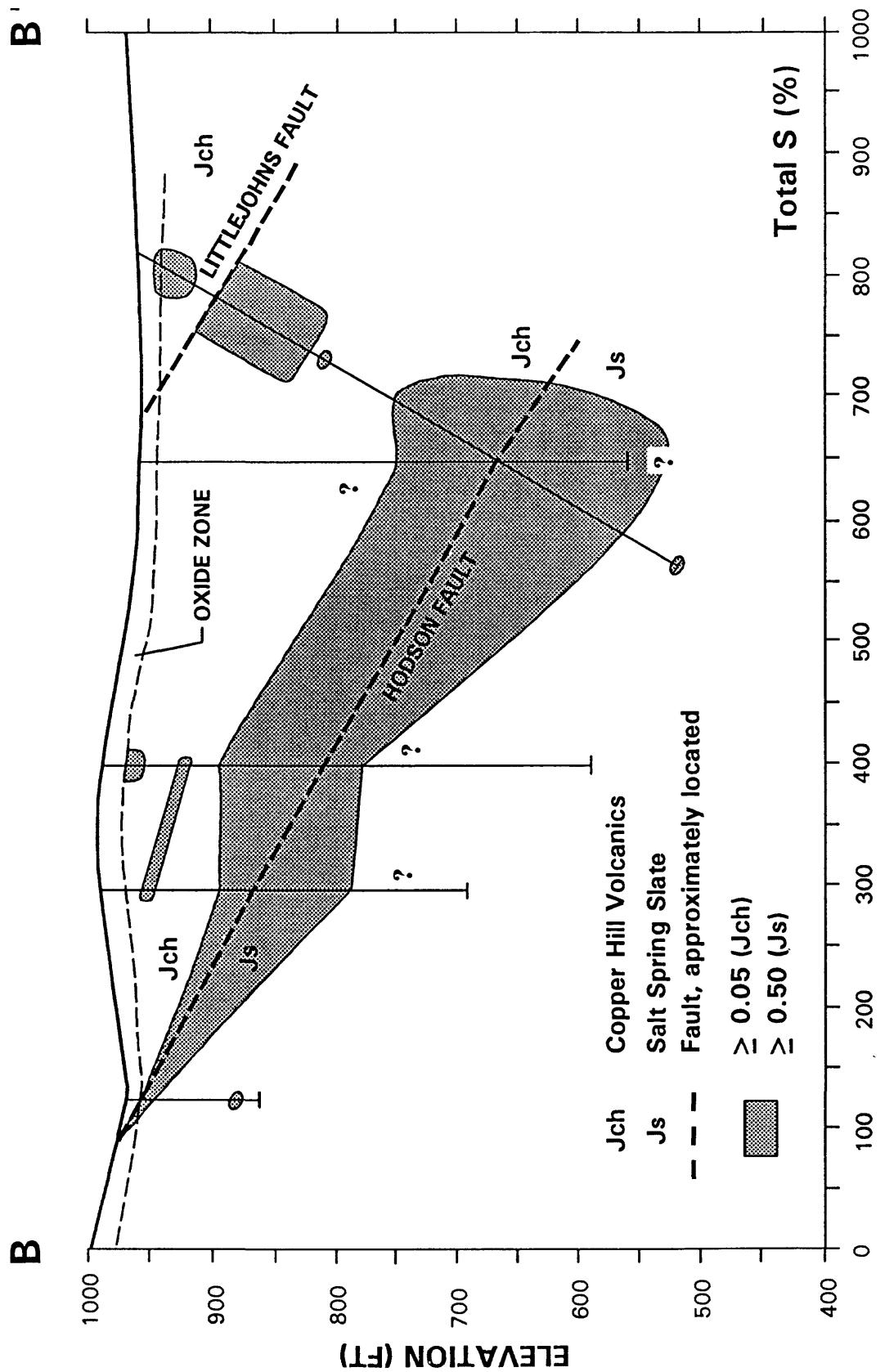


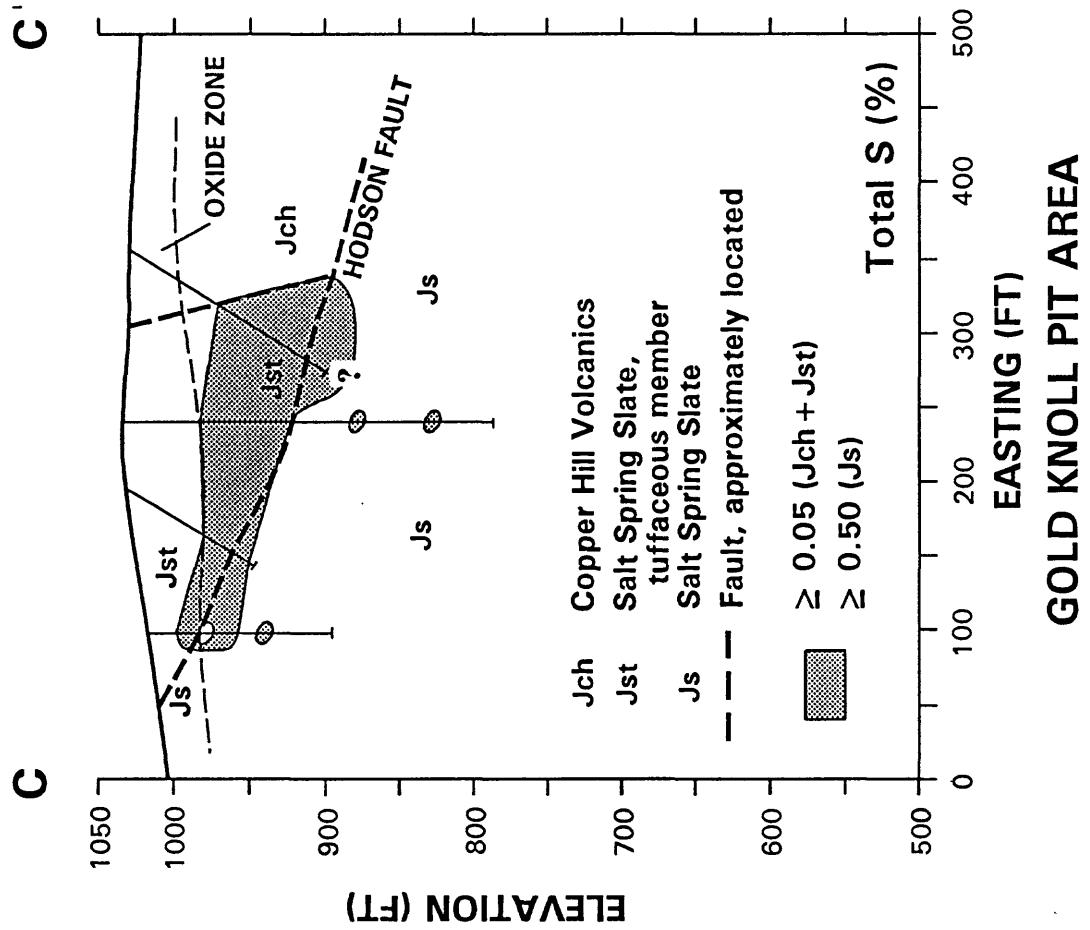
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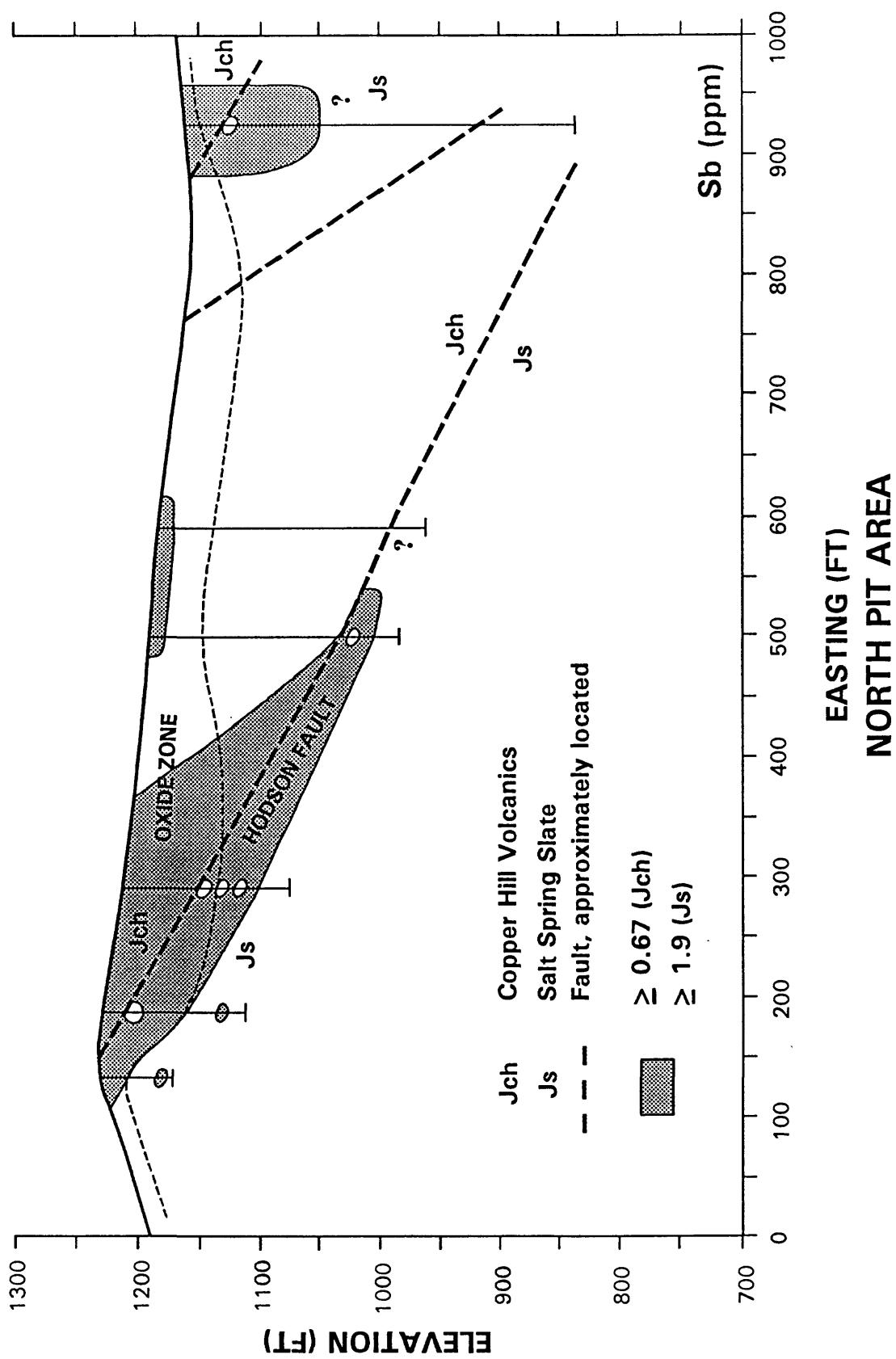
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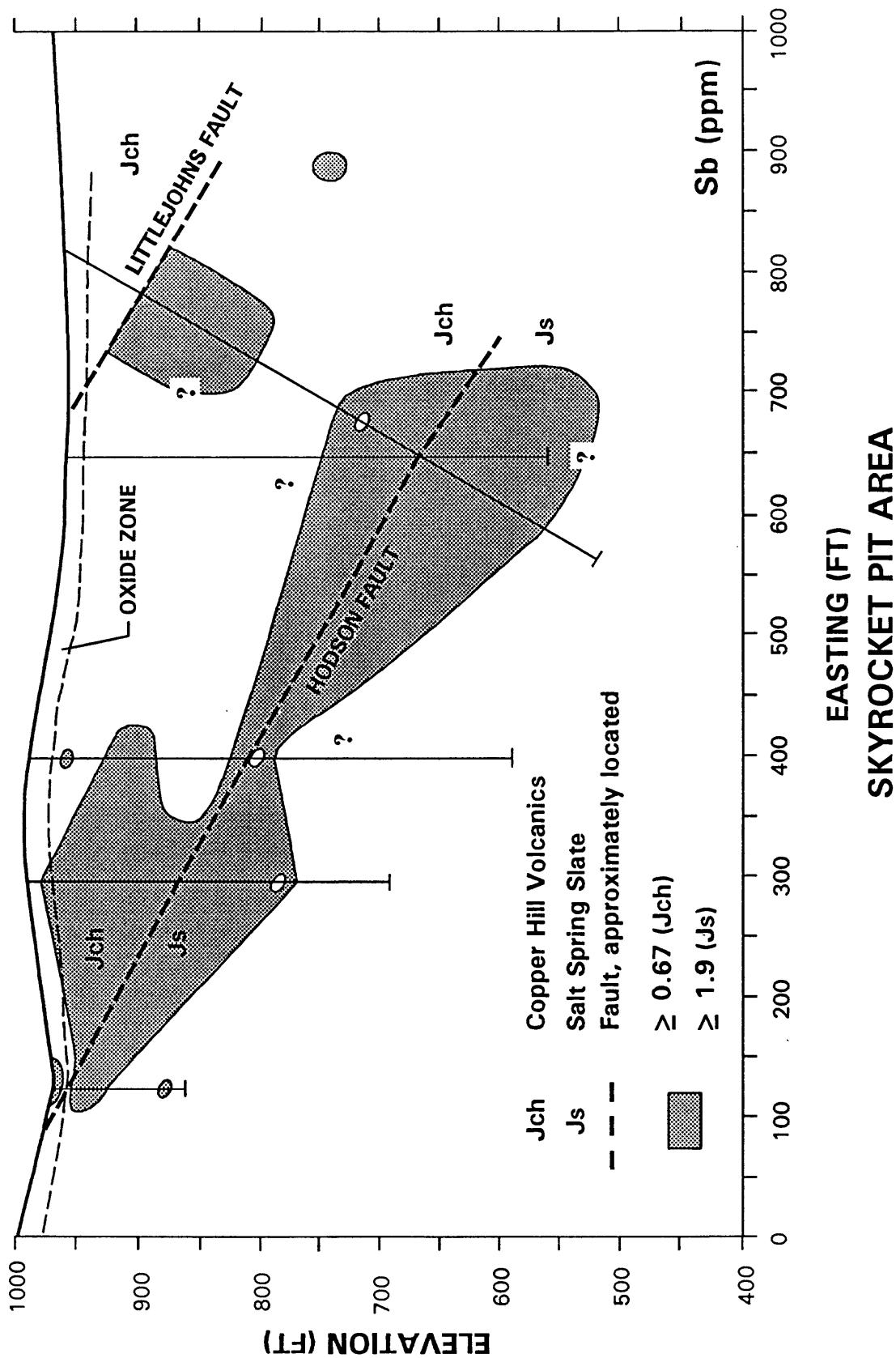


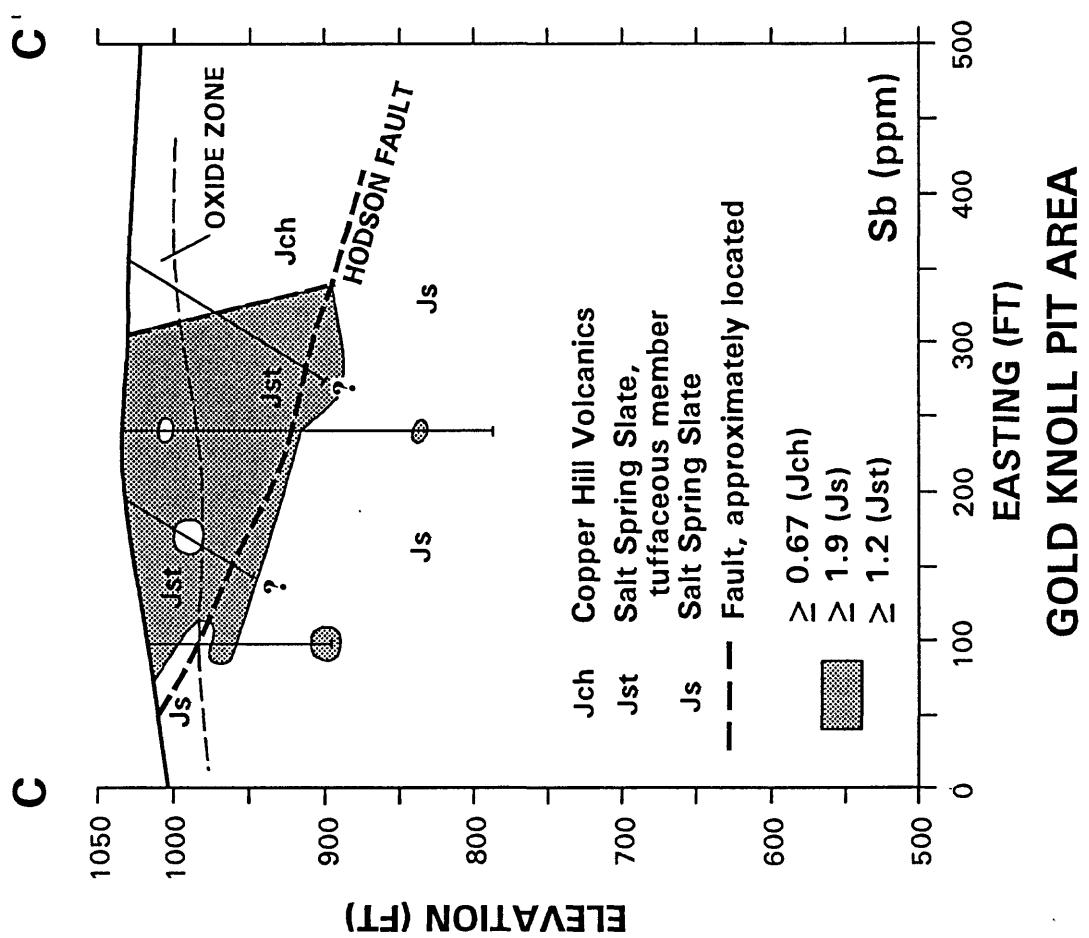


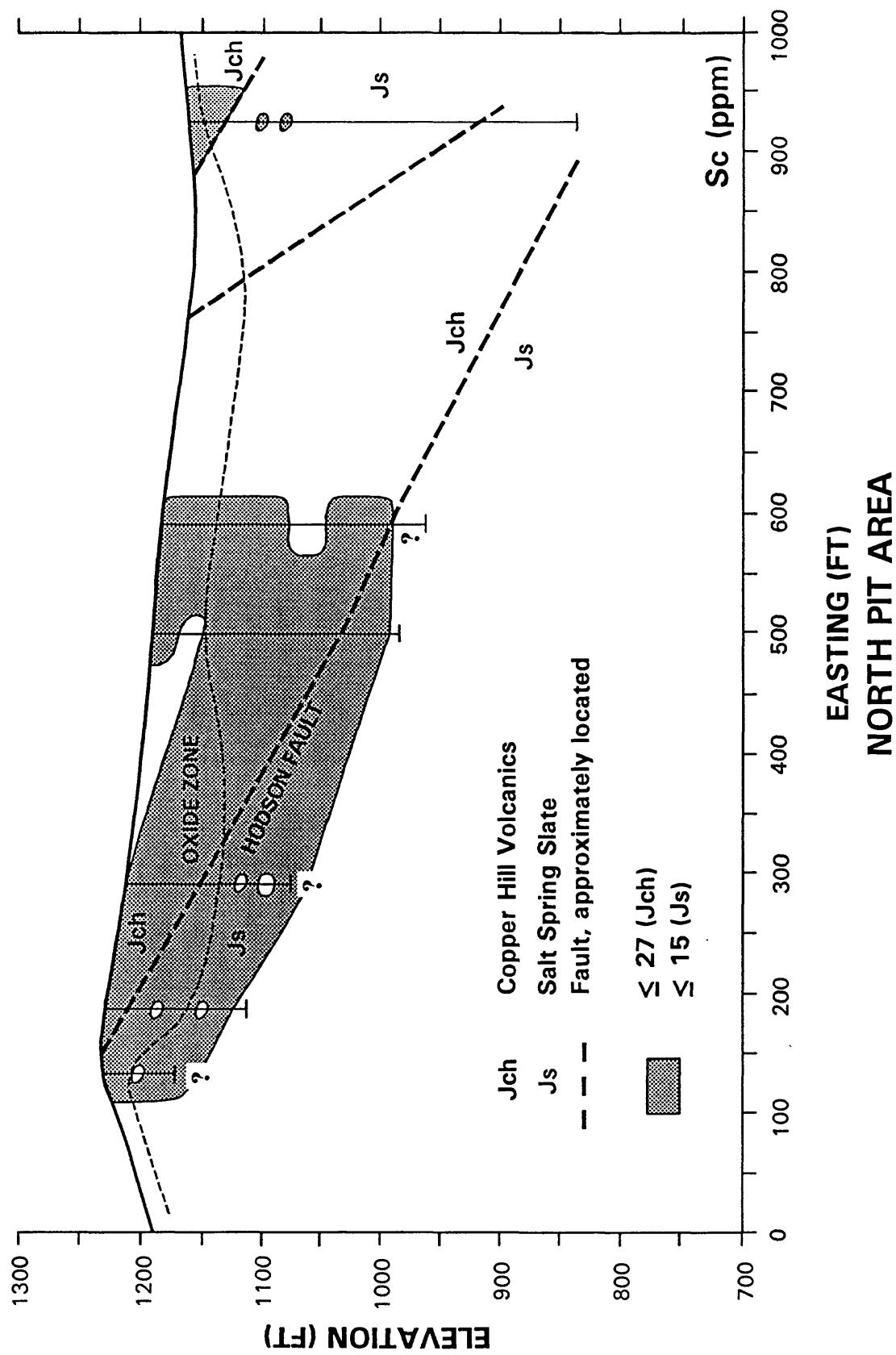
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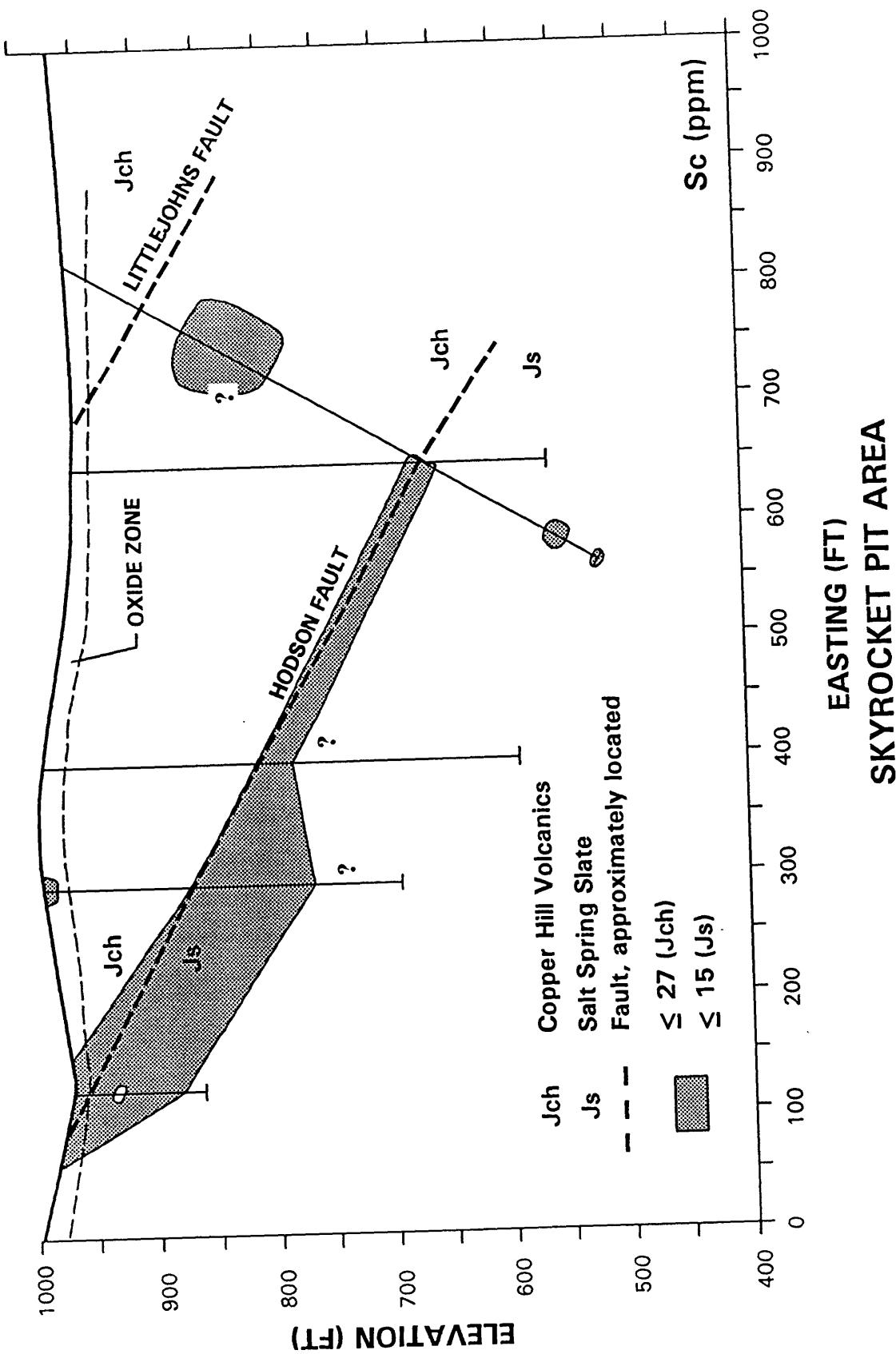
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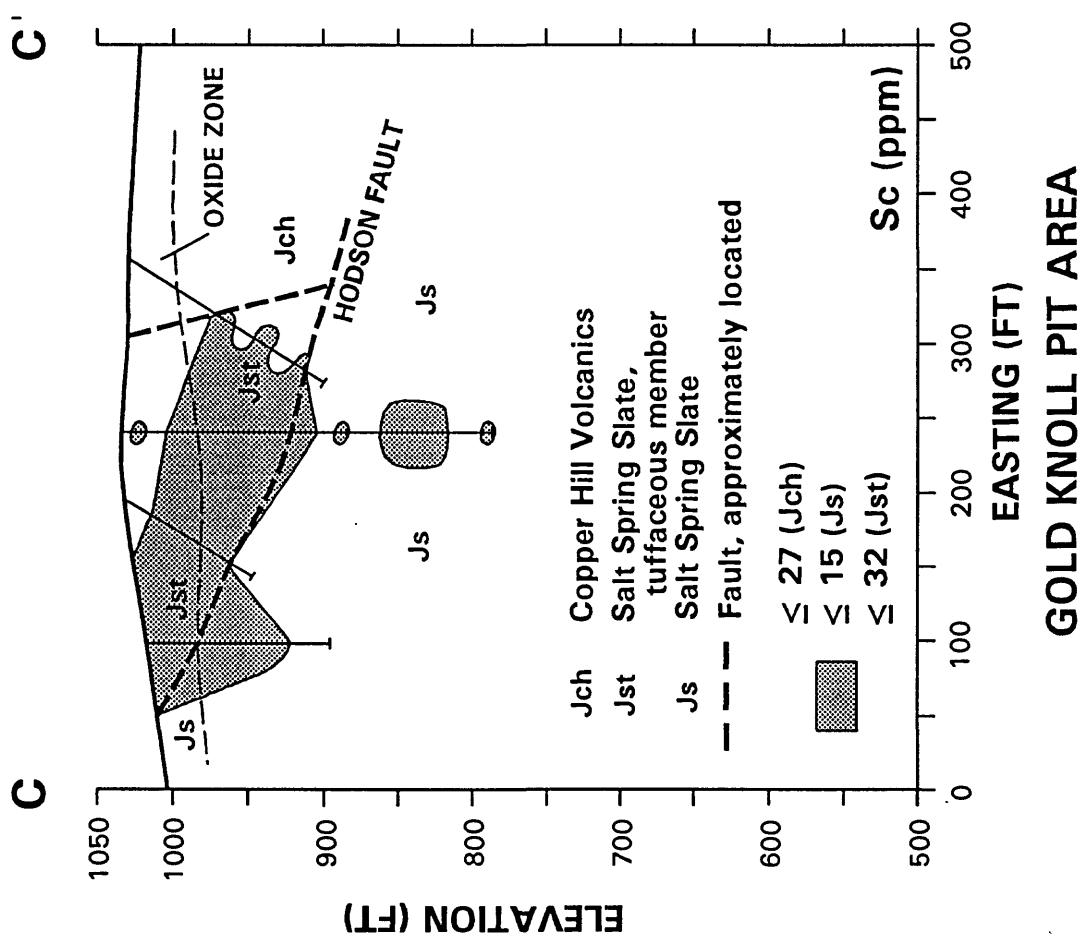


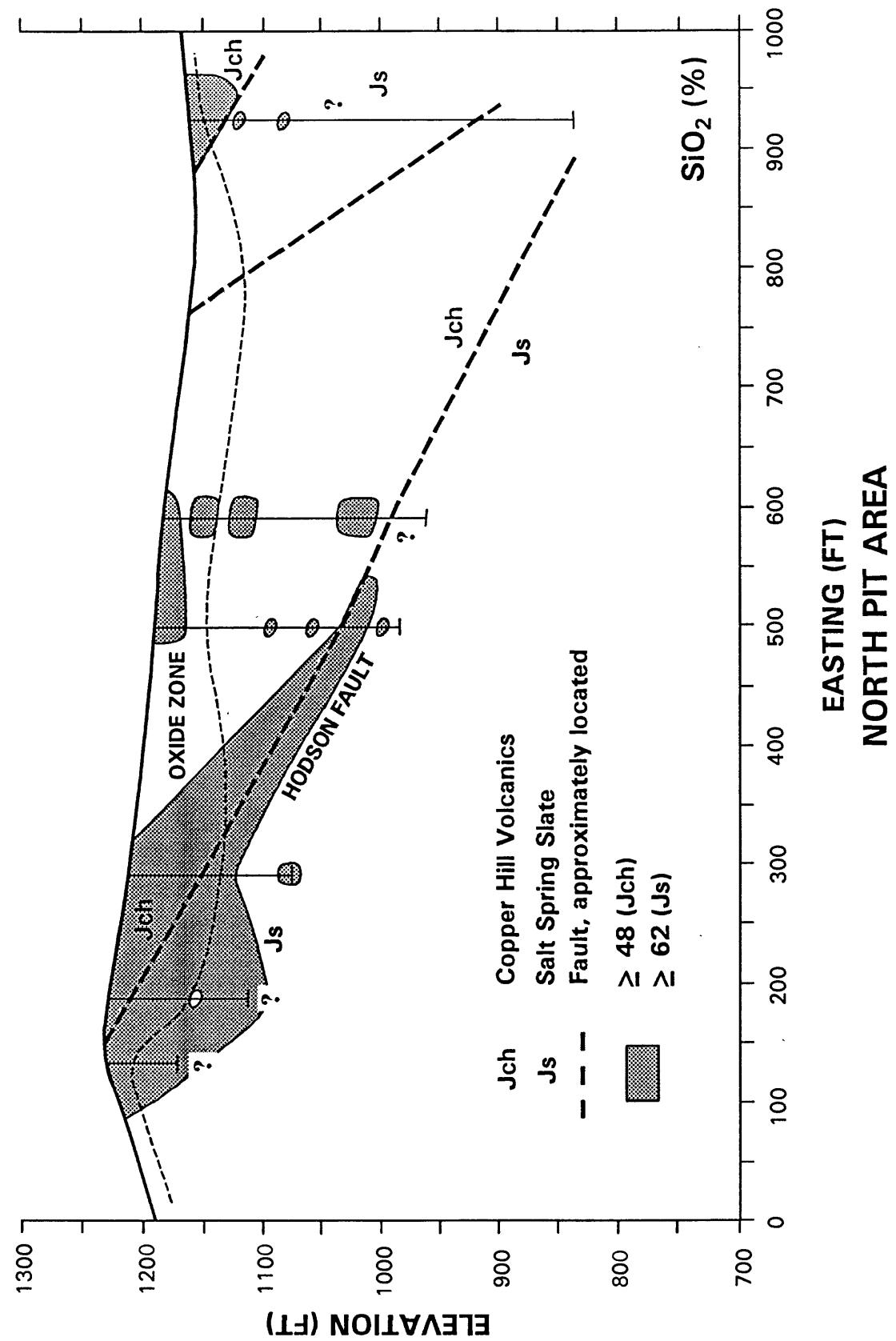
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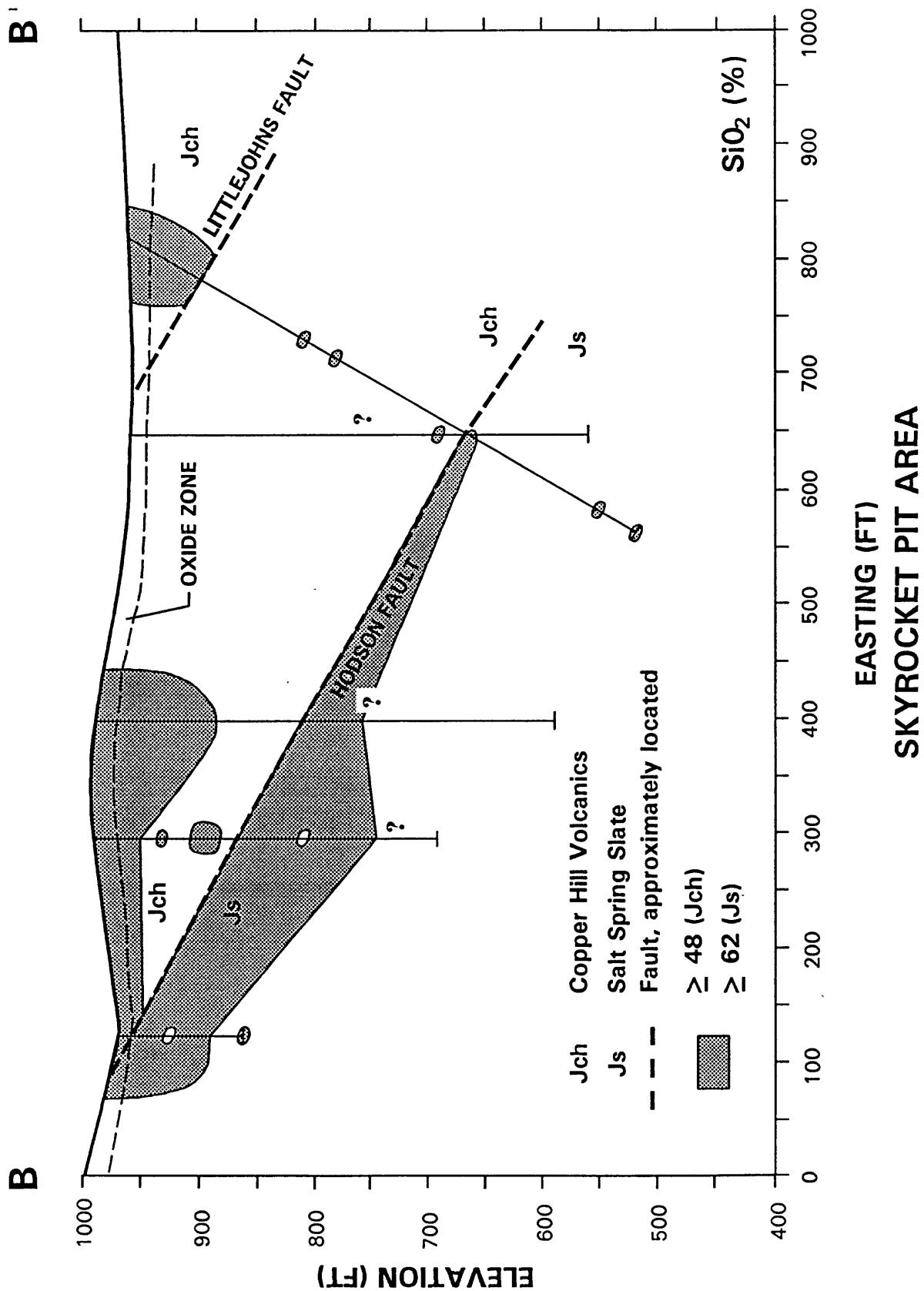


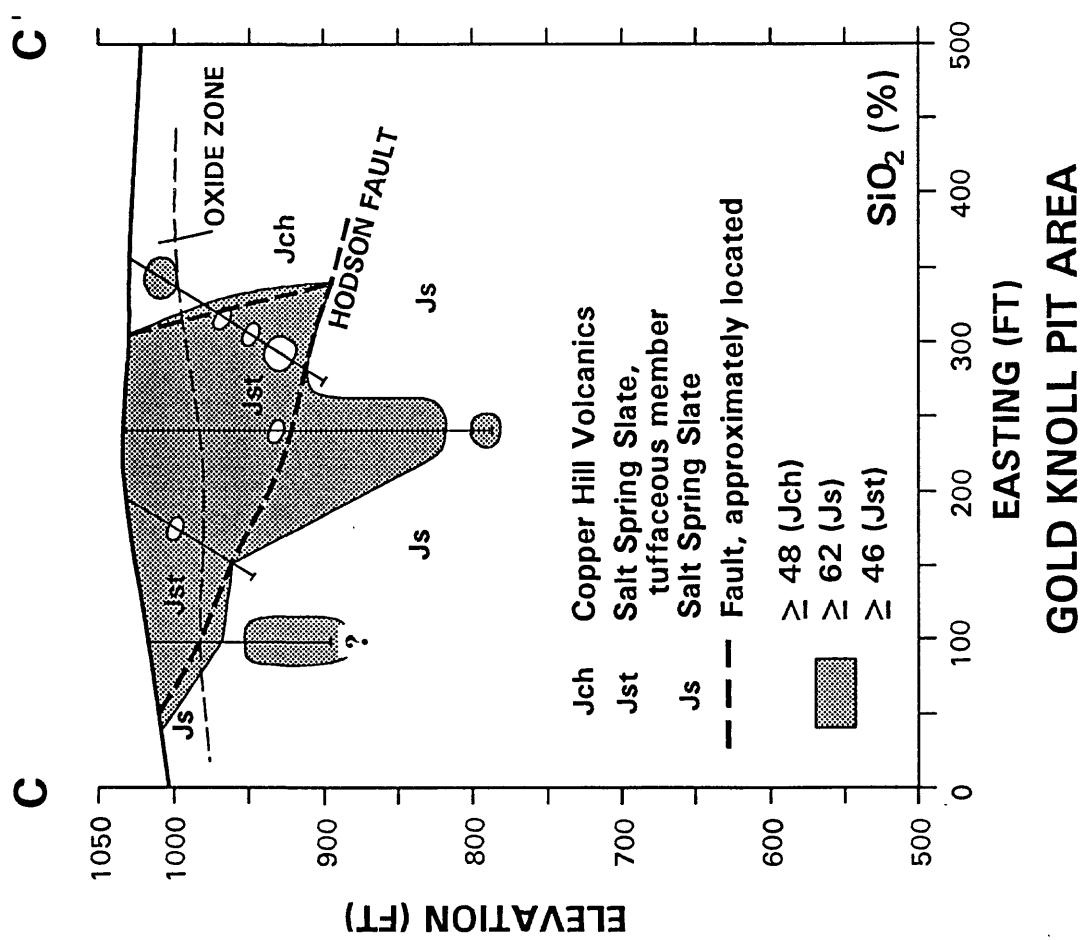
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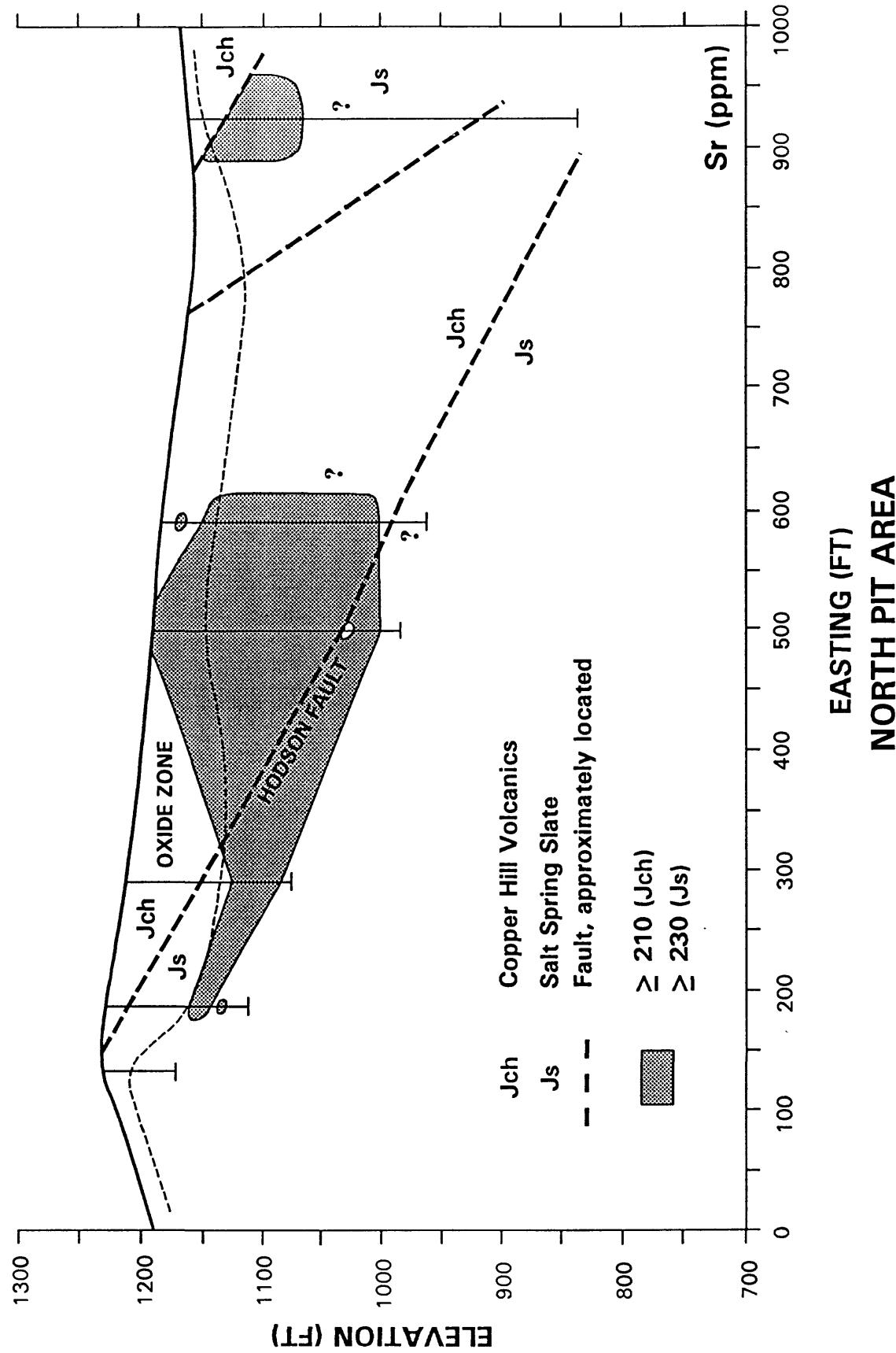
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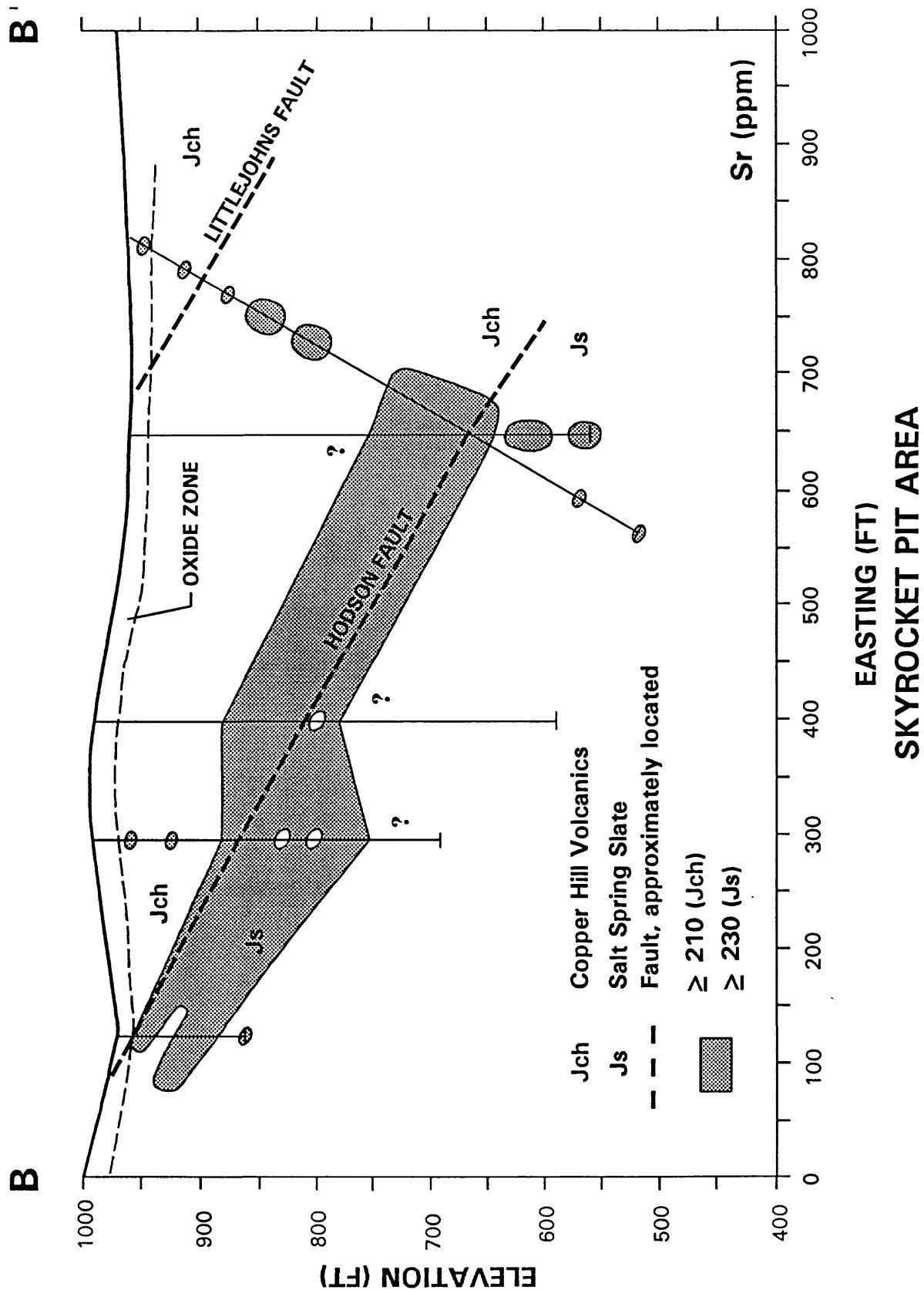


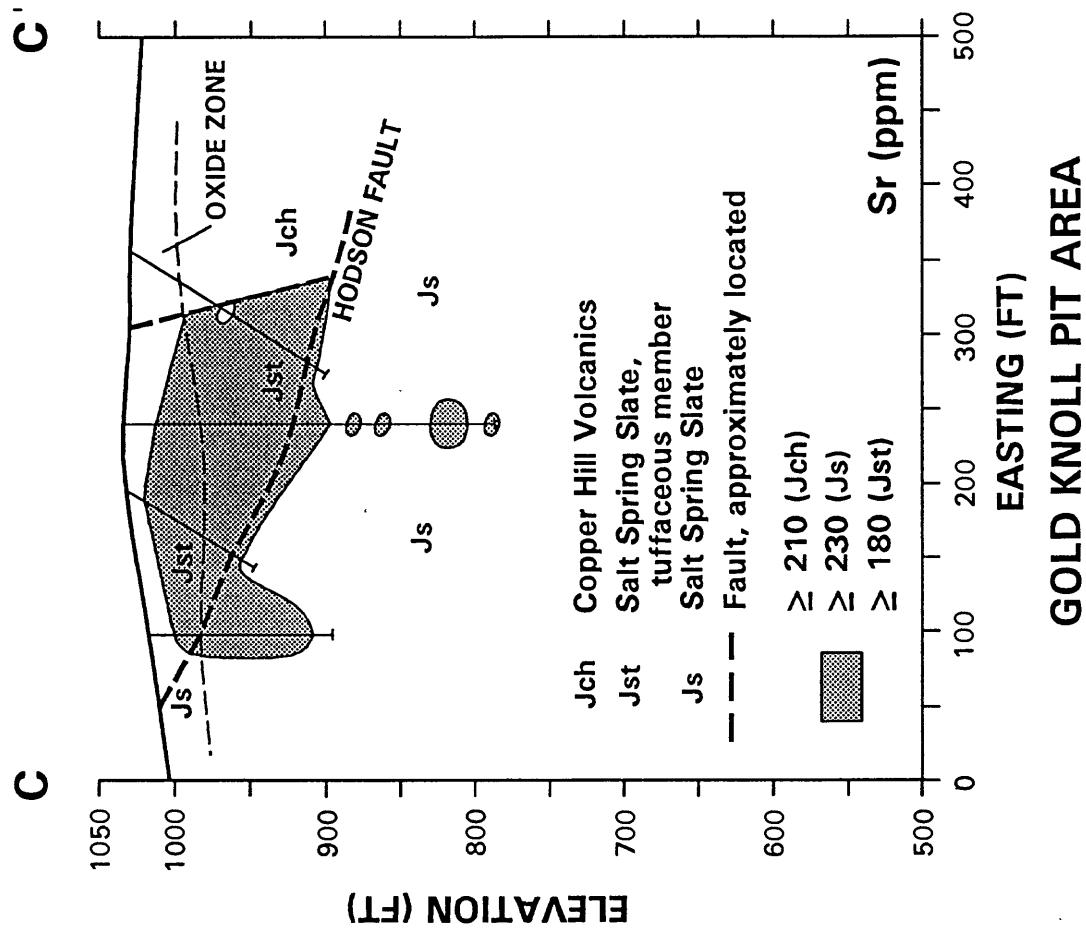
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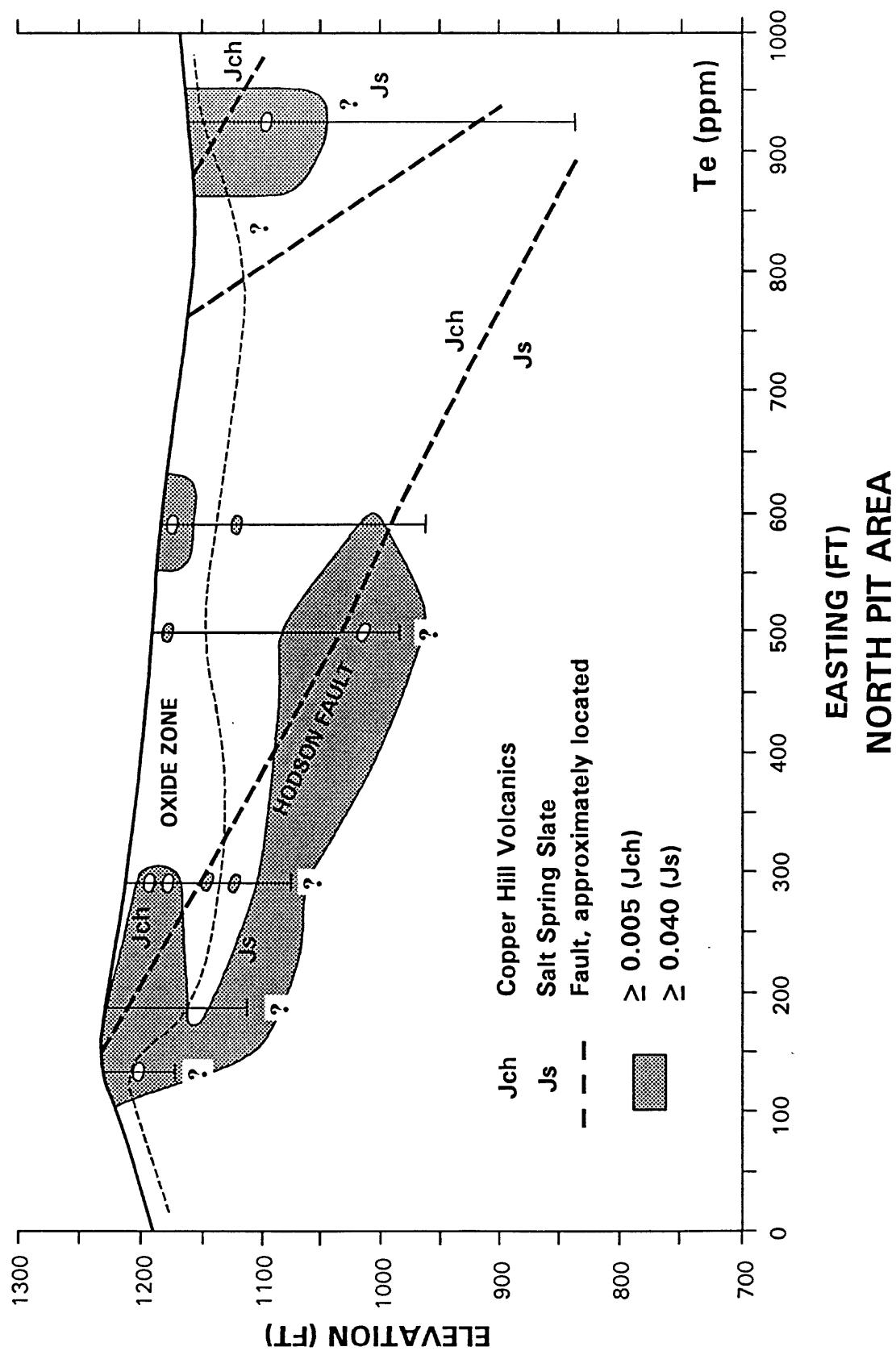




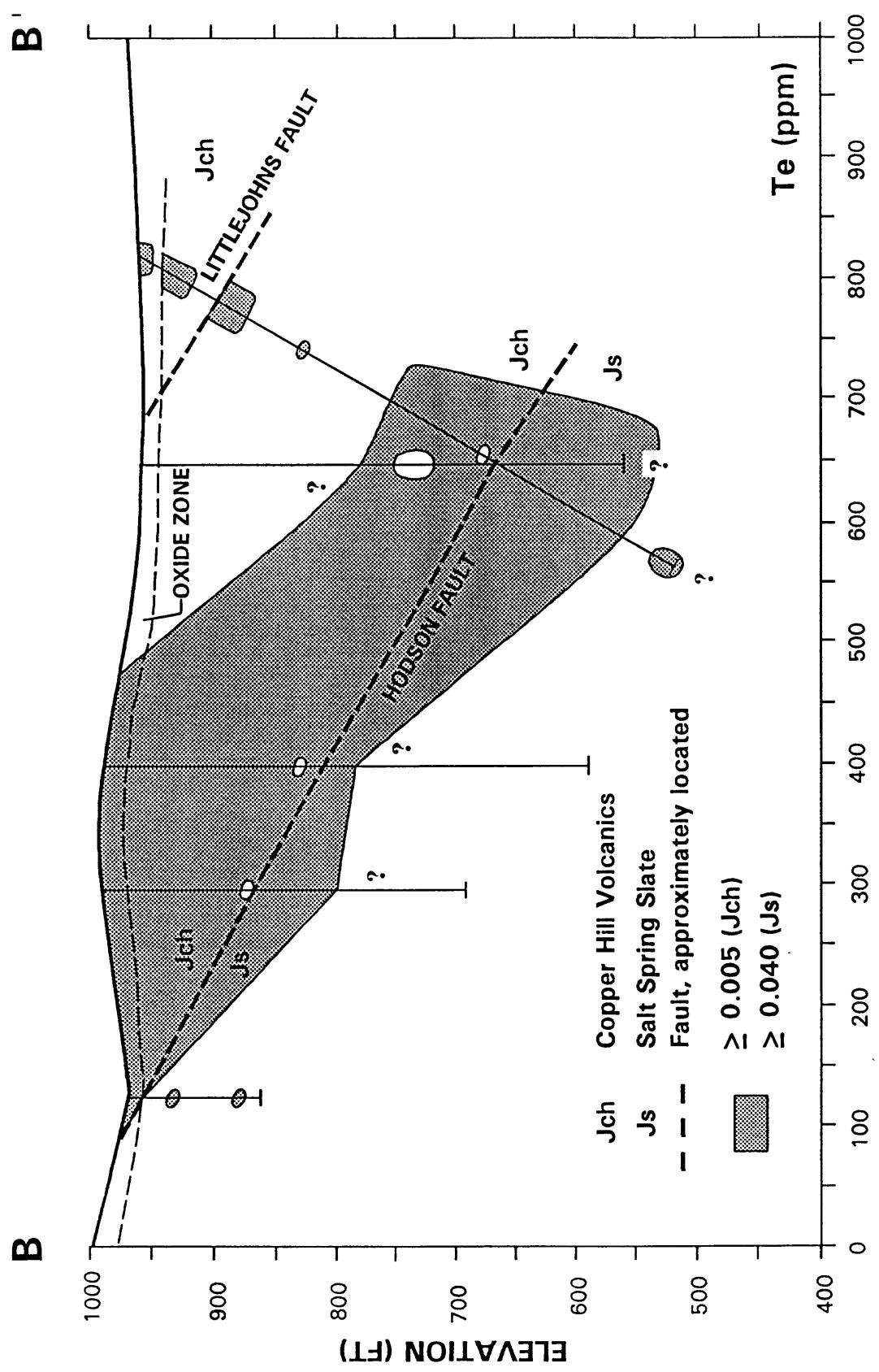
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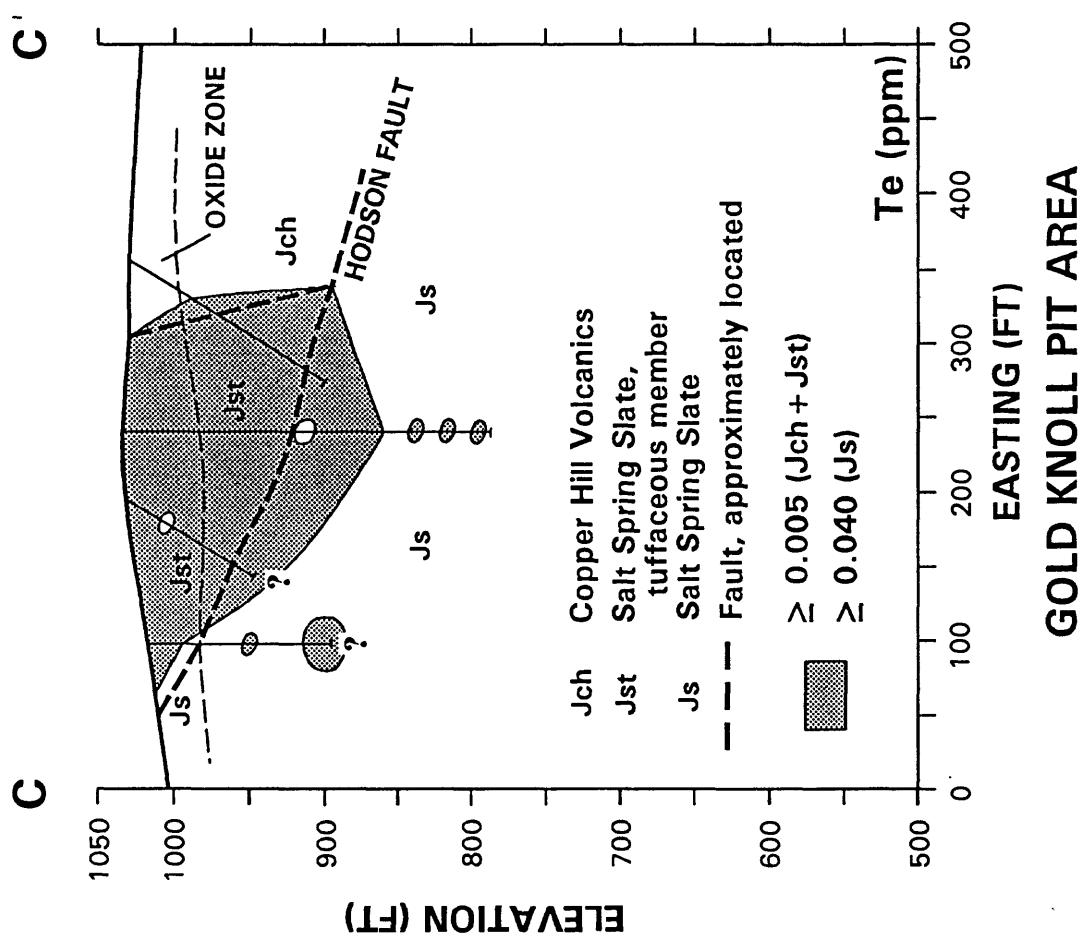


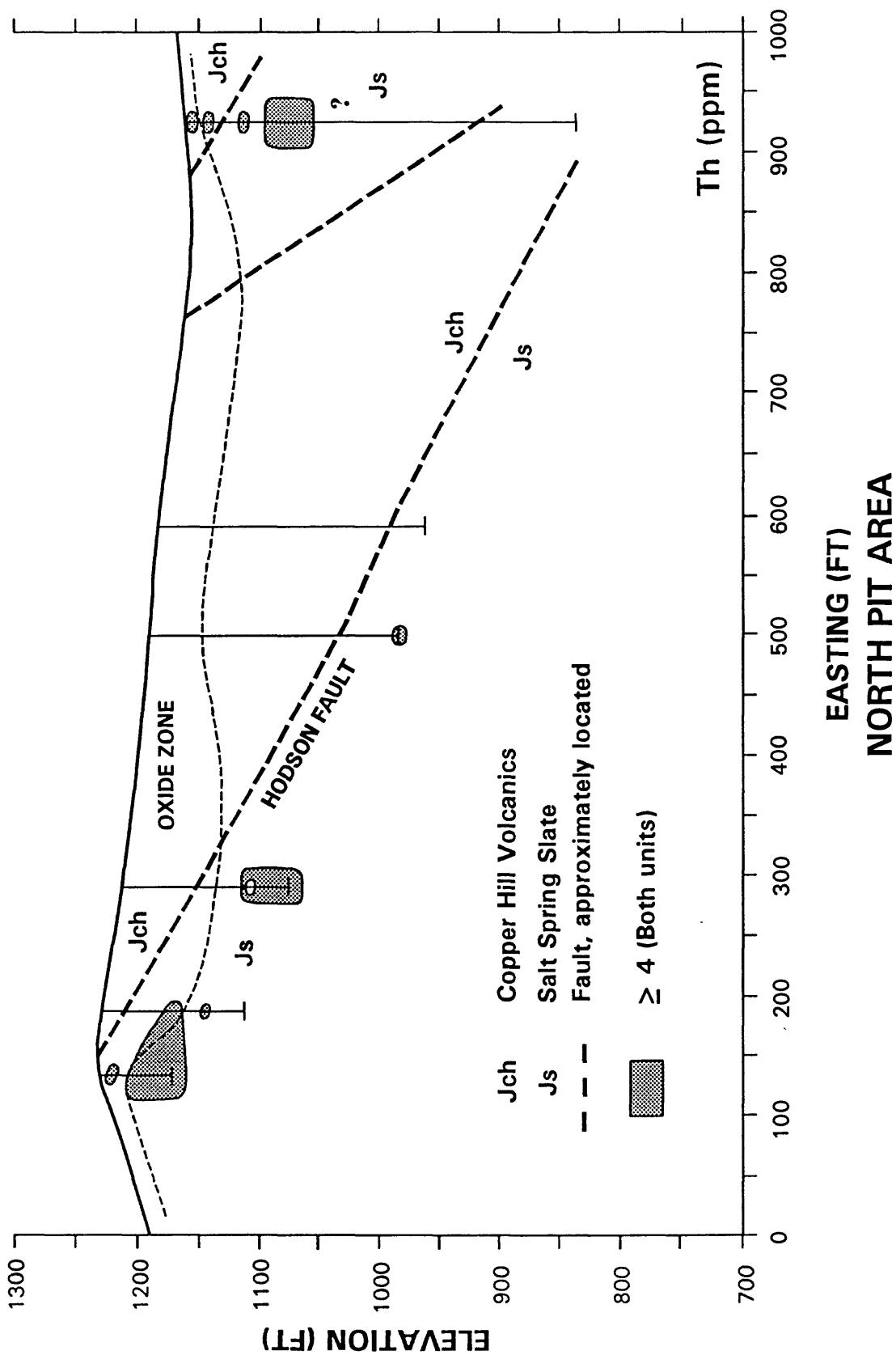


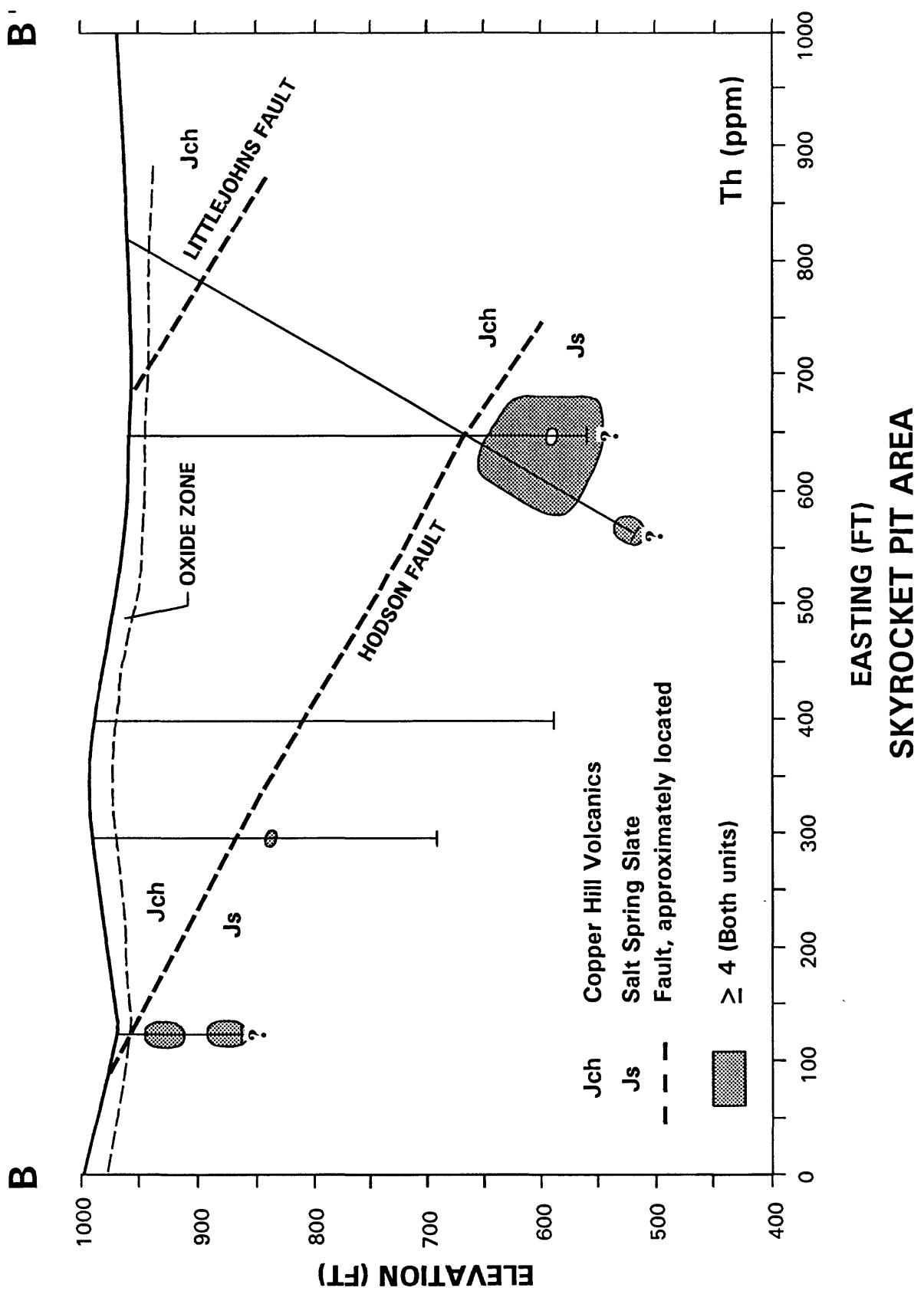
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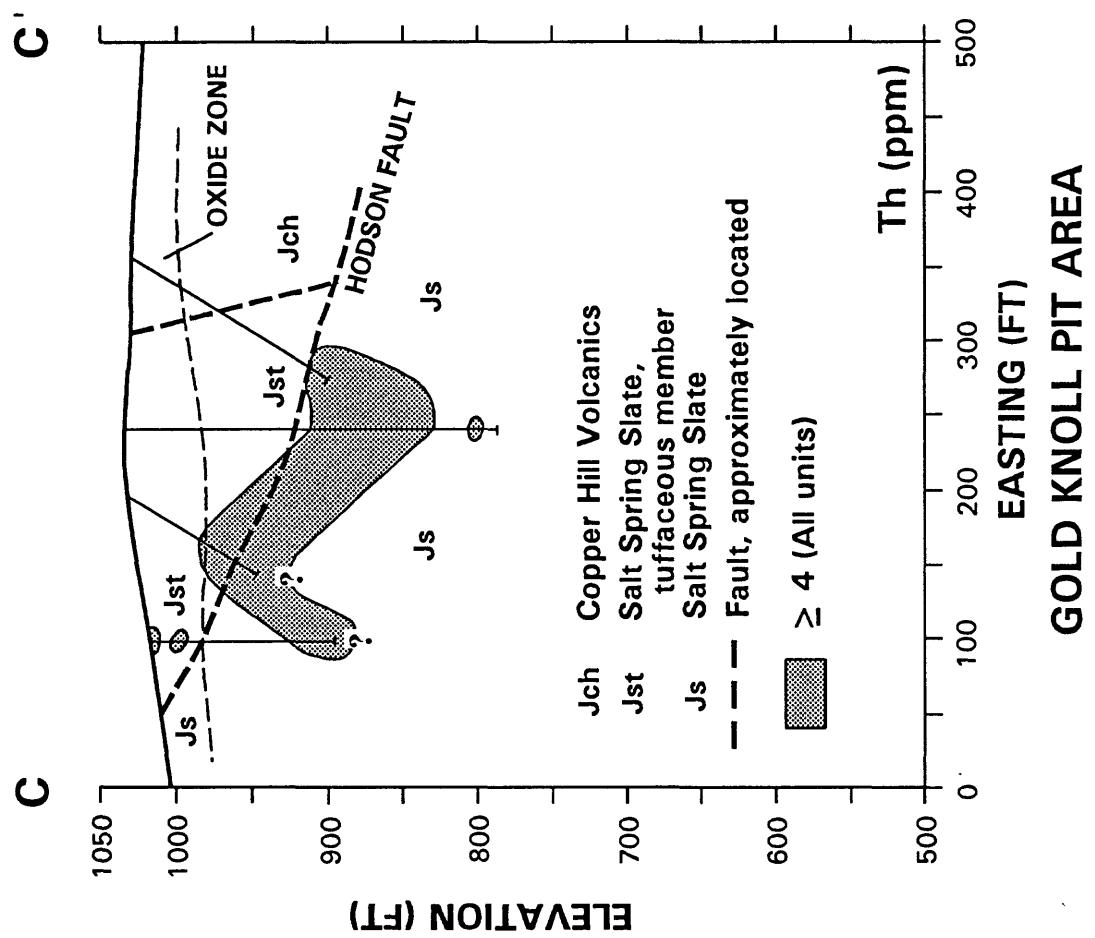
EASTING (FT)
SKYROCKET PIT AREA

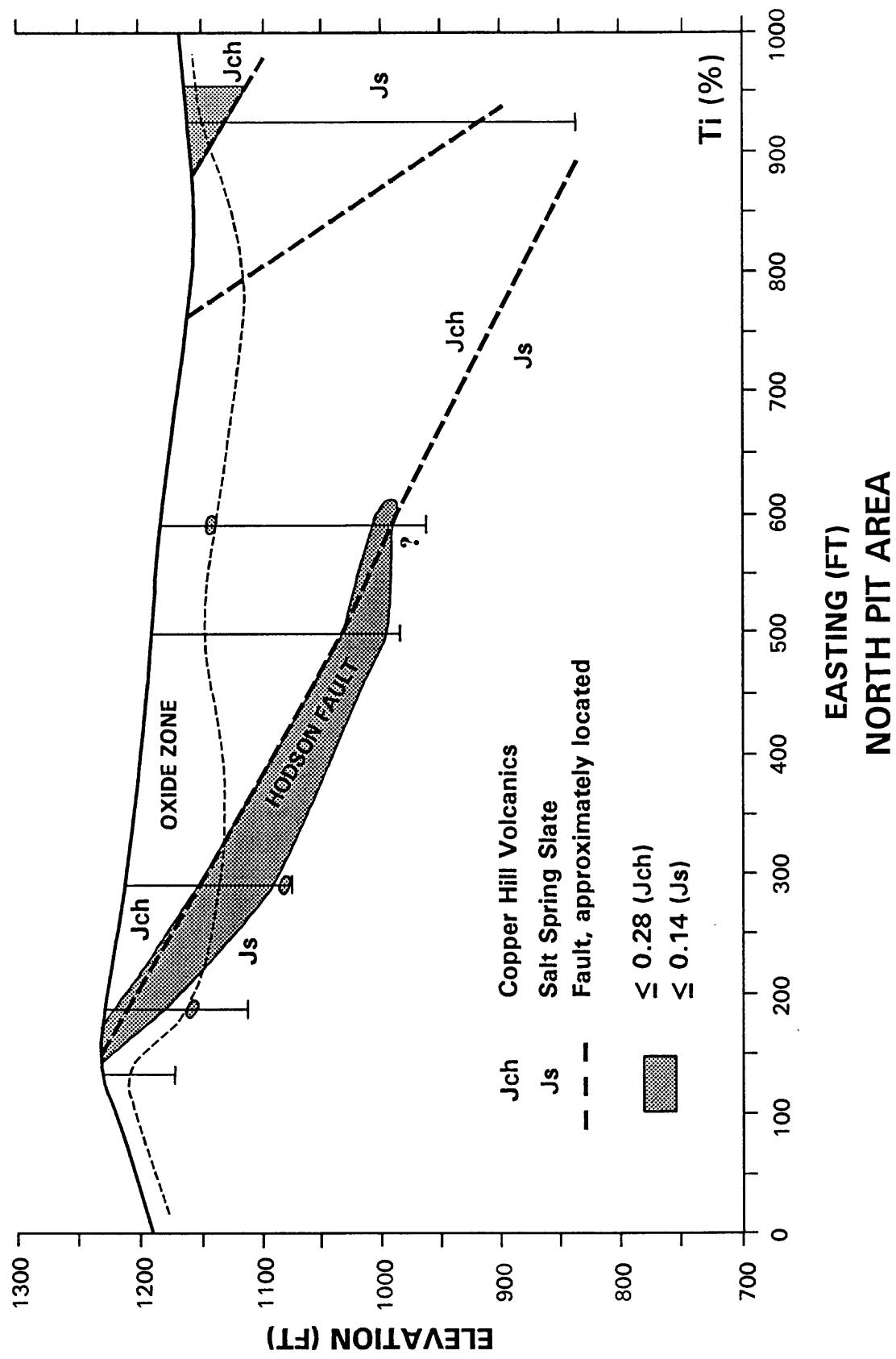




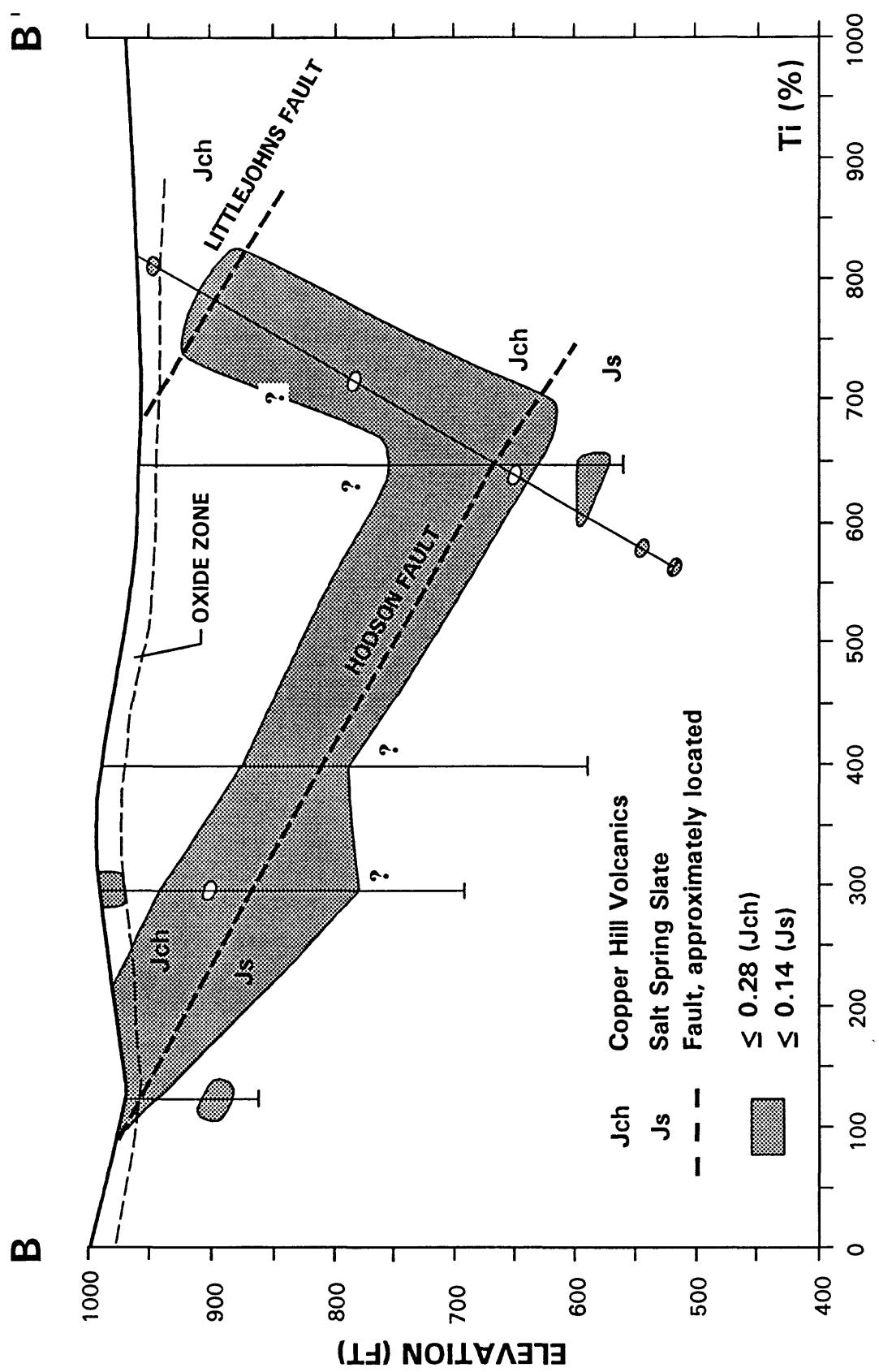
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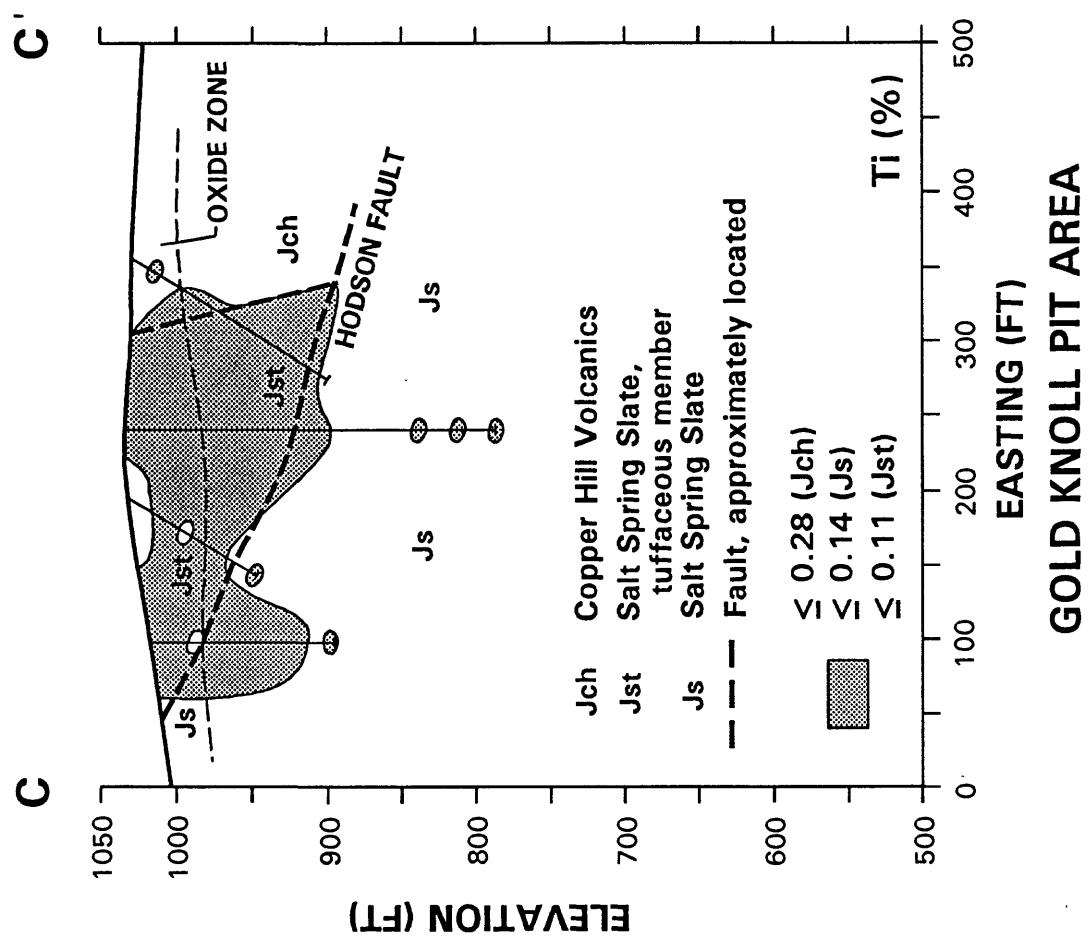


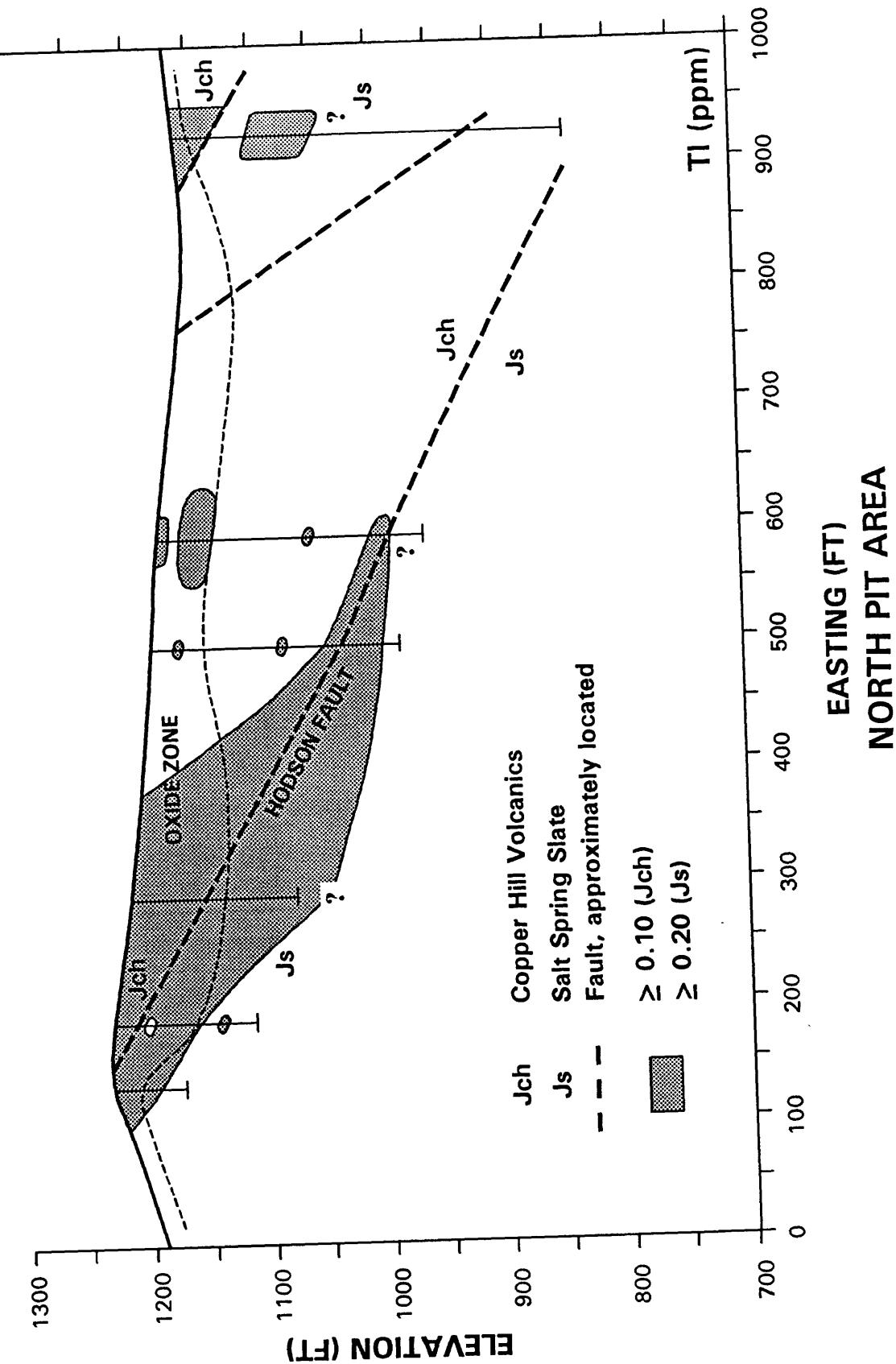


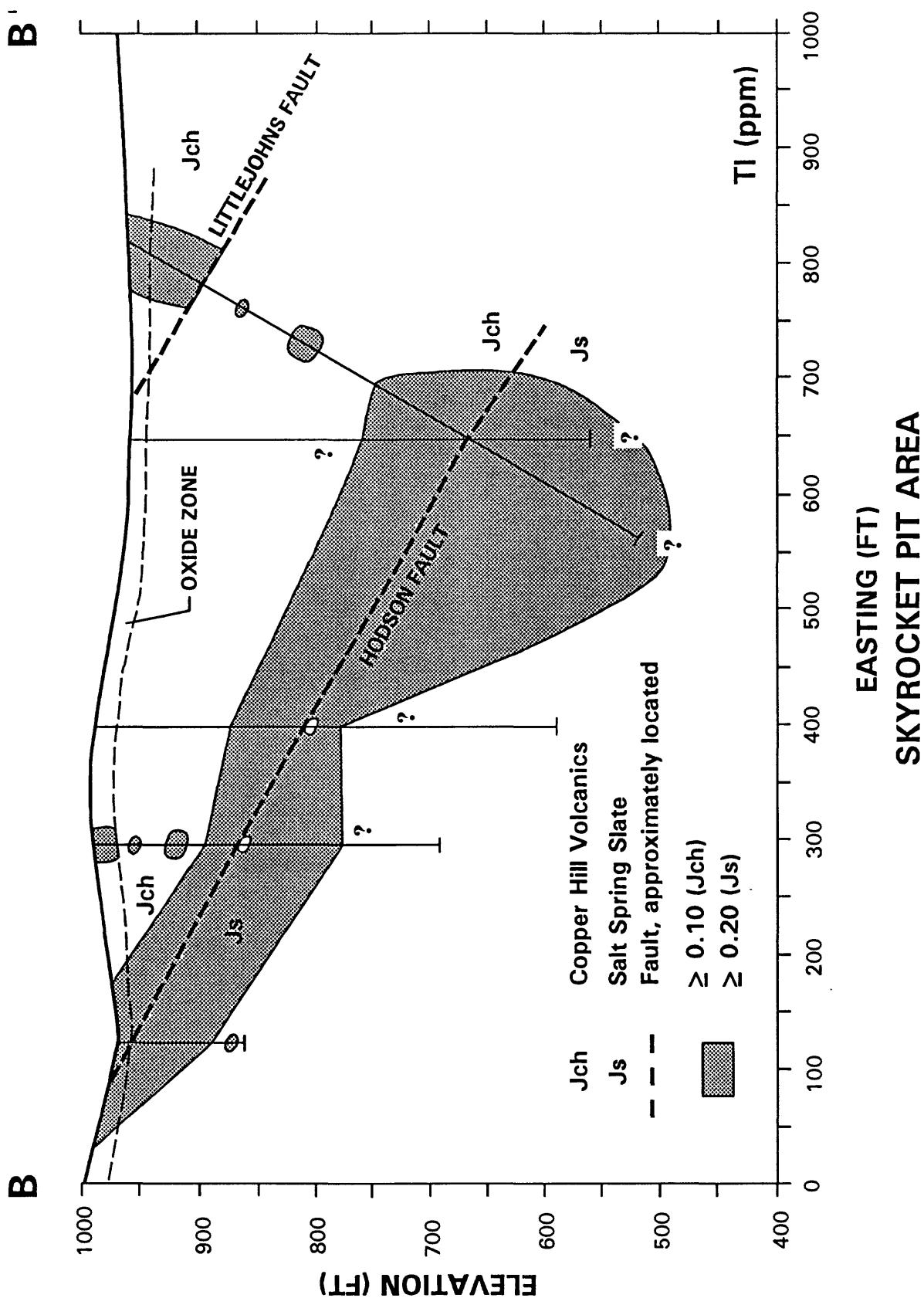
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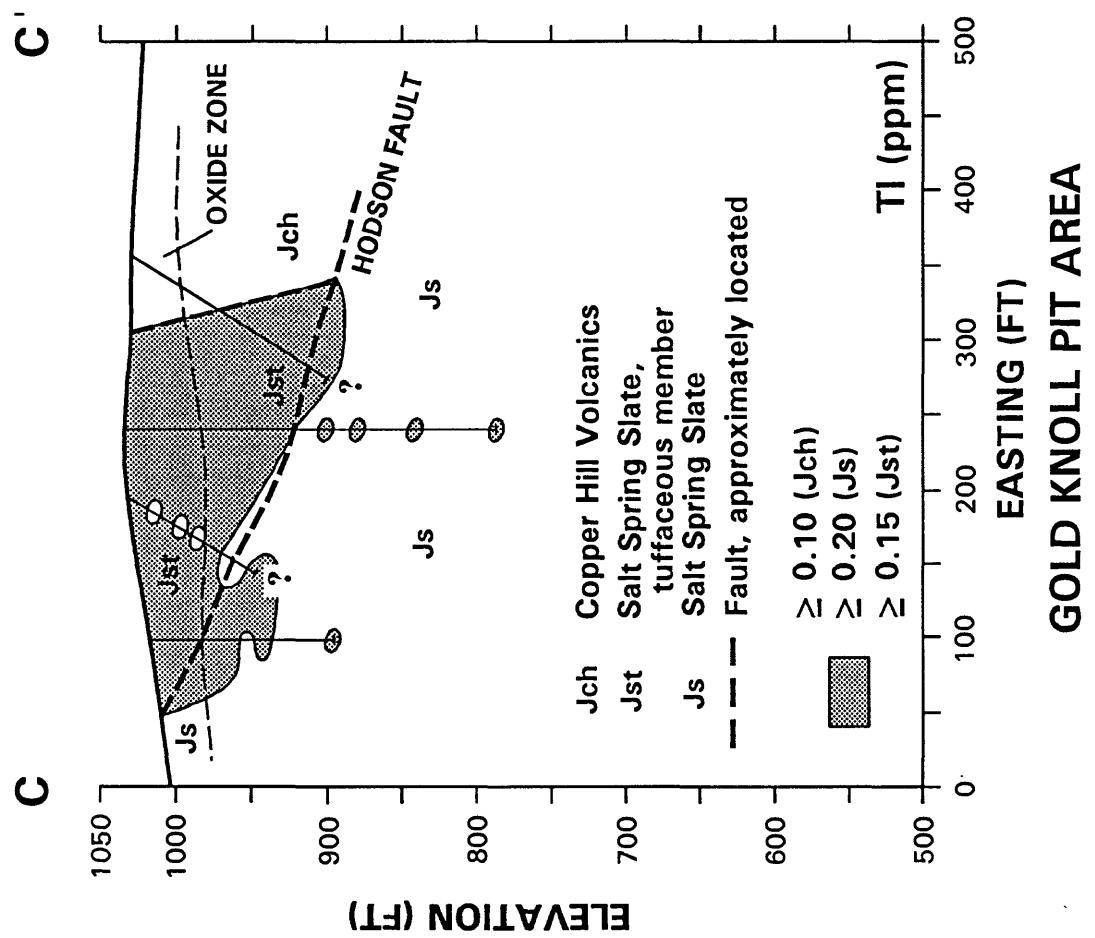
EASTING (FT)
SKYROCKET PIT AREA





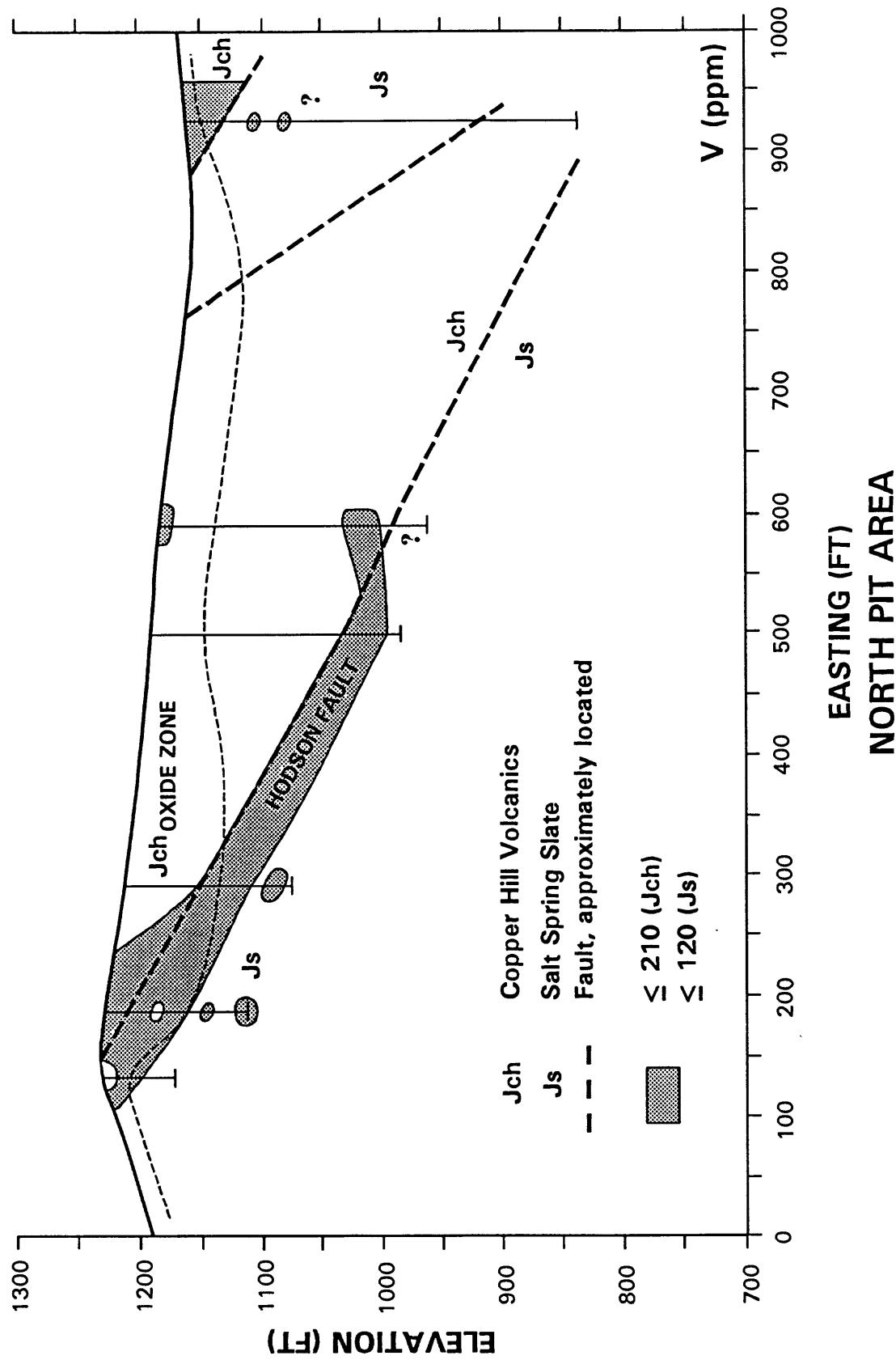
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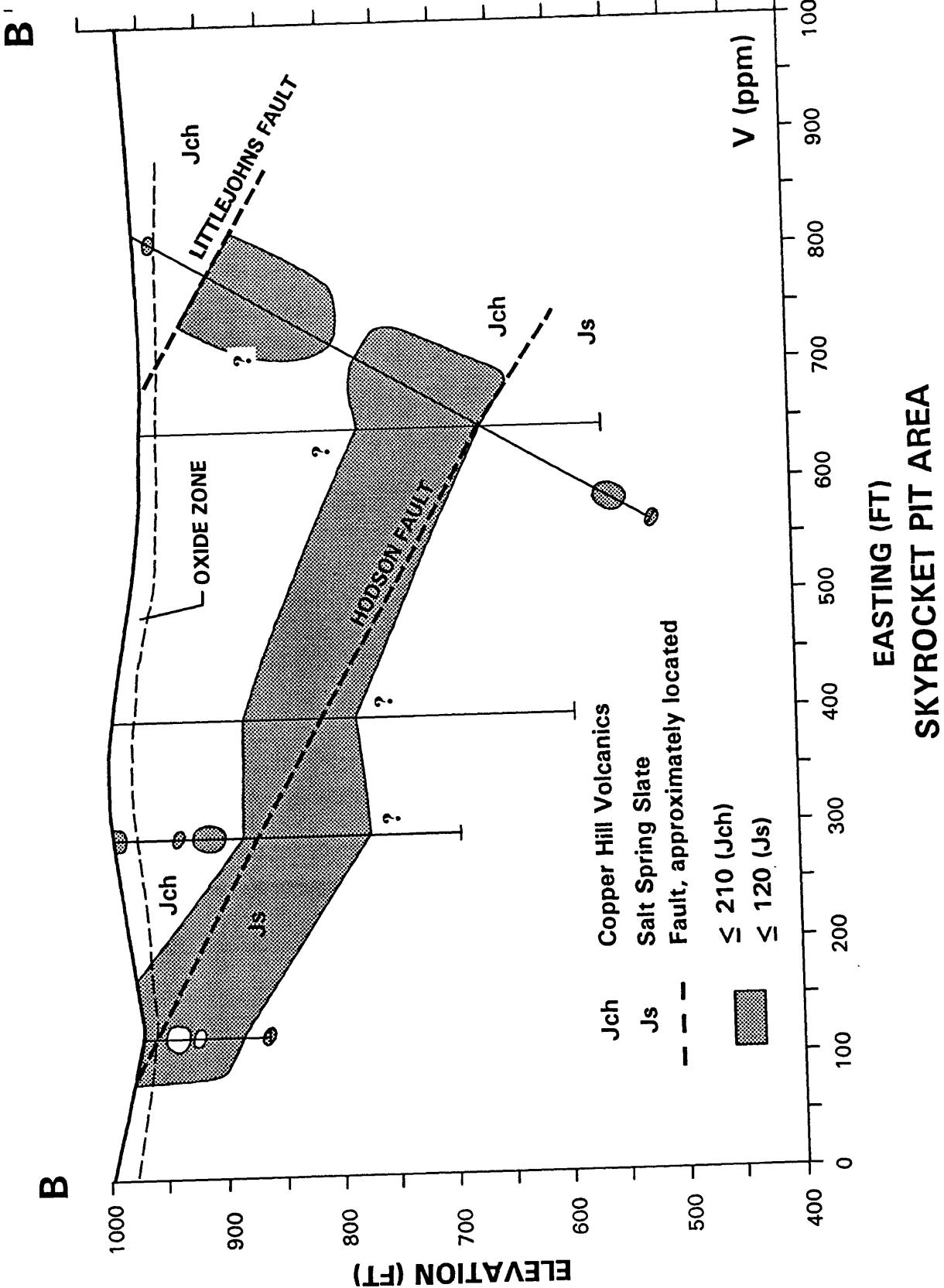


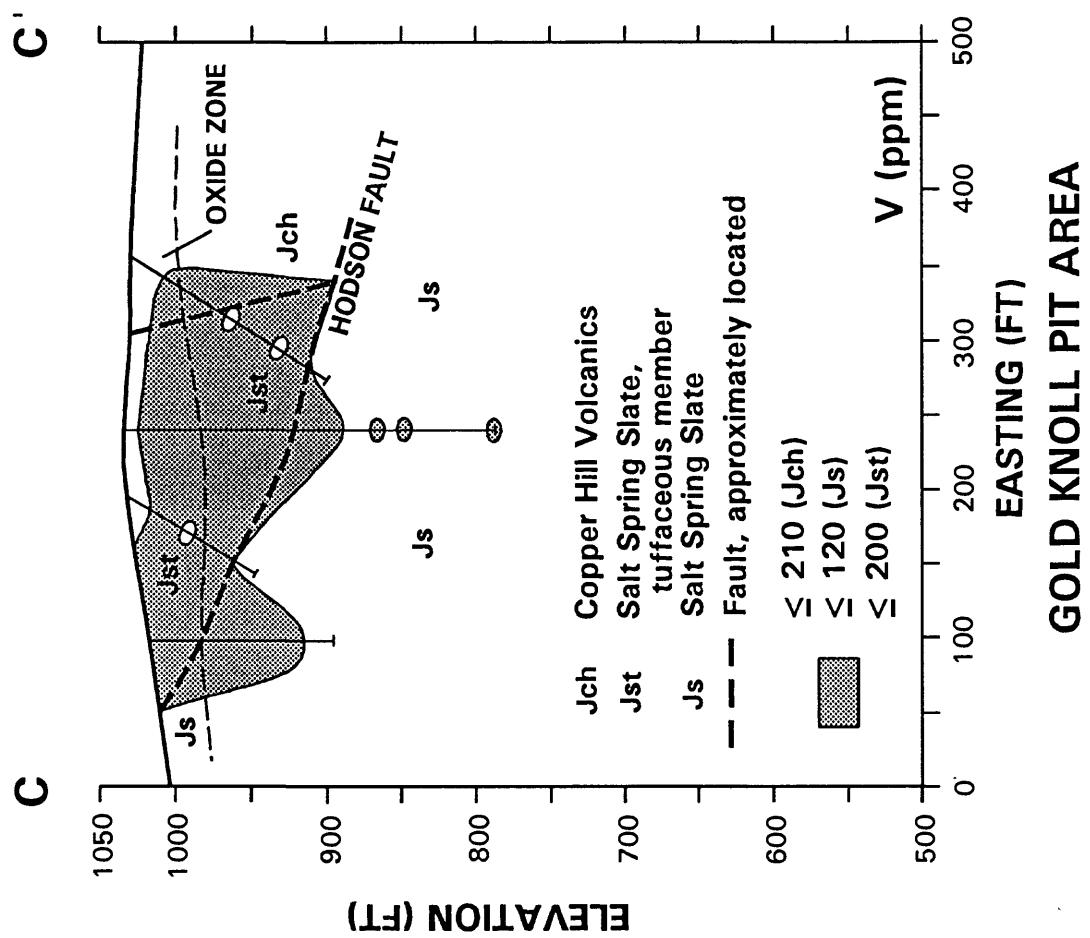


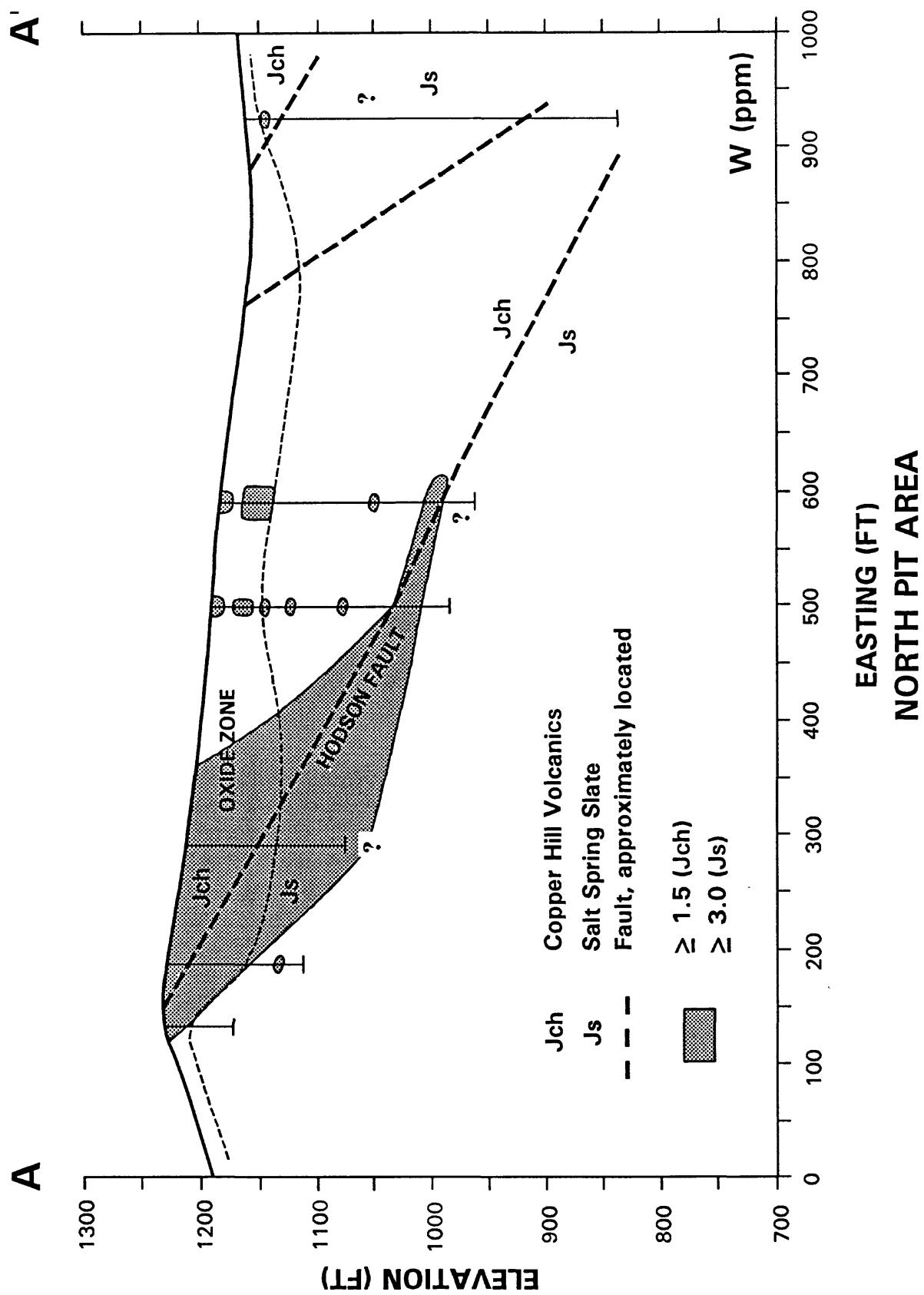
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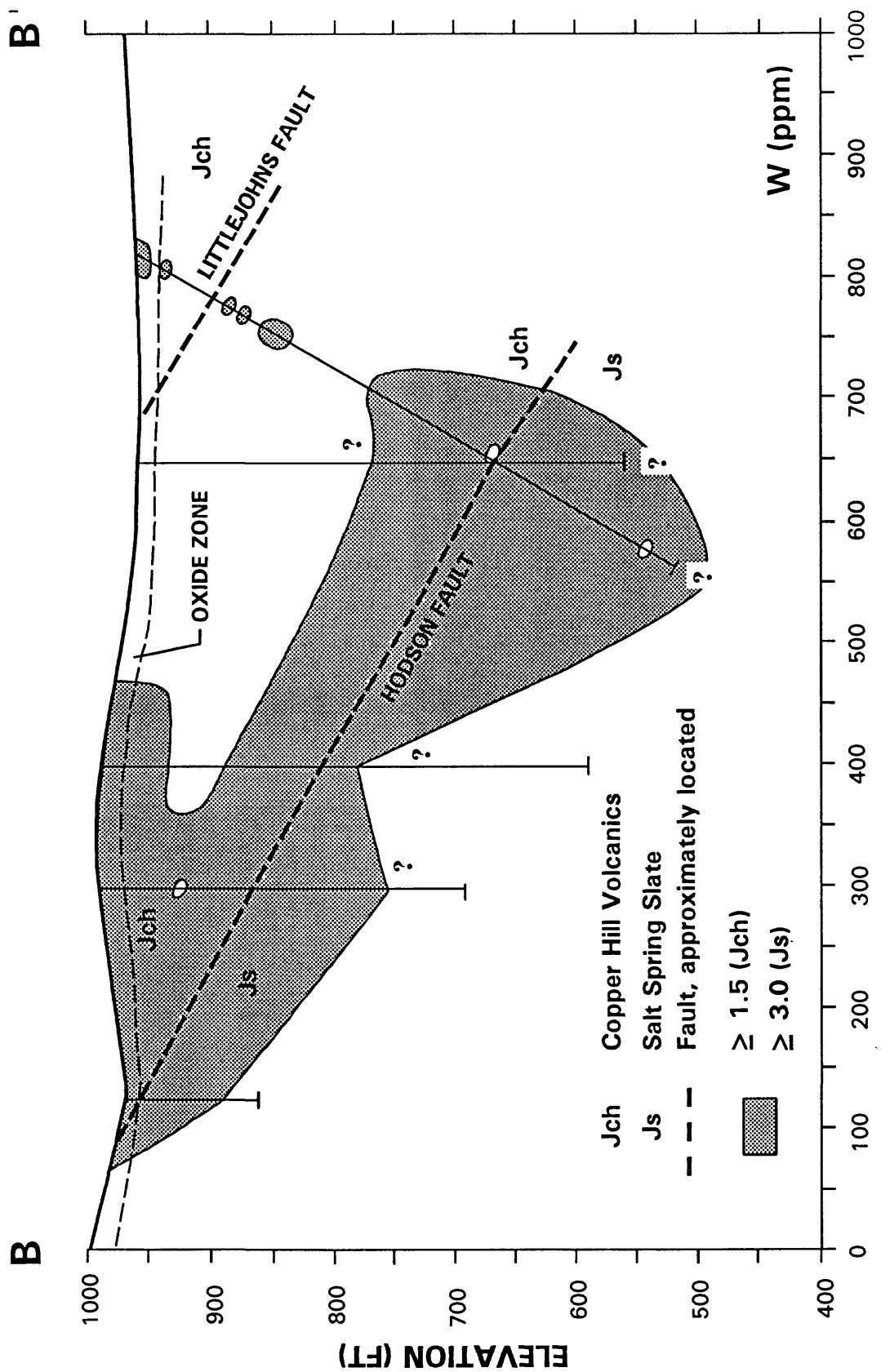


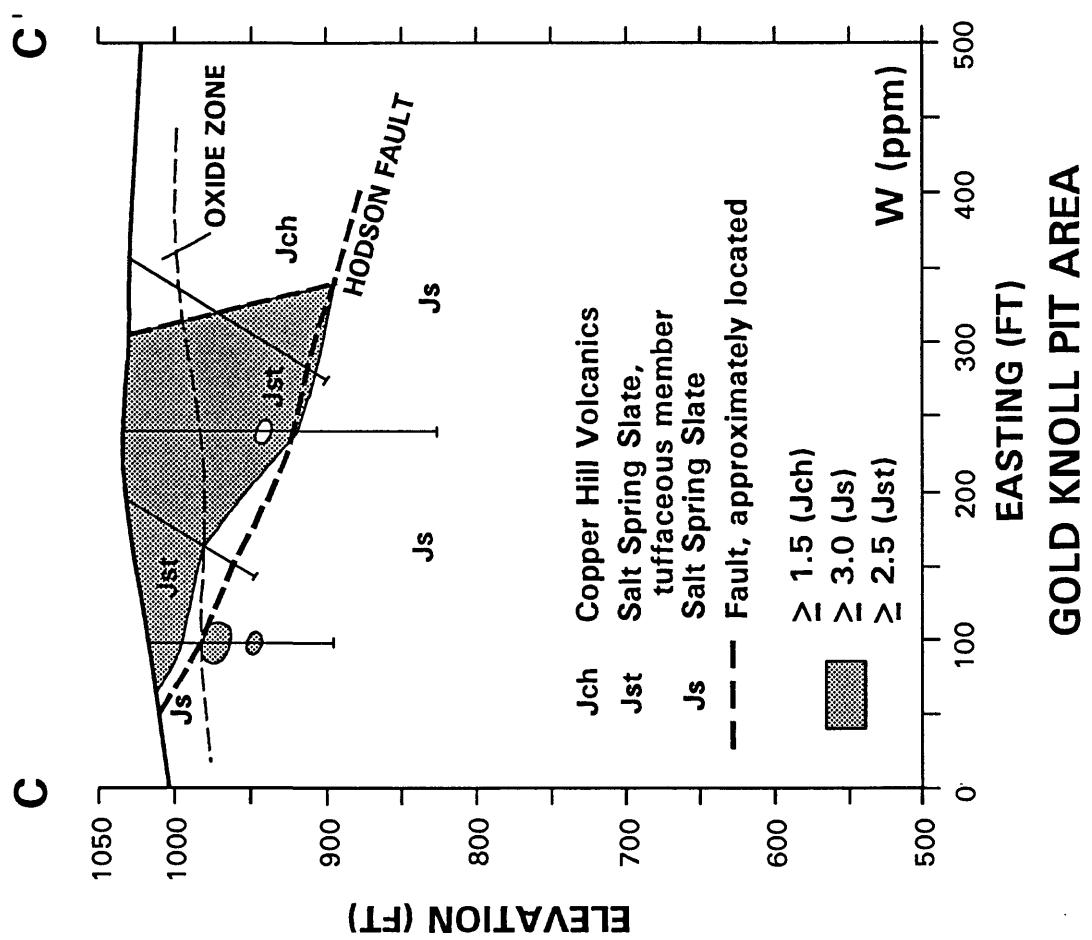






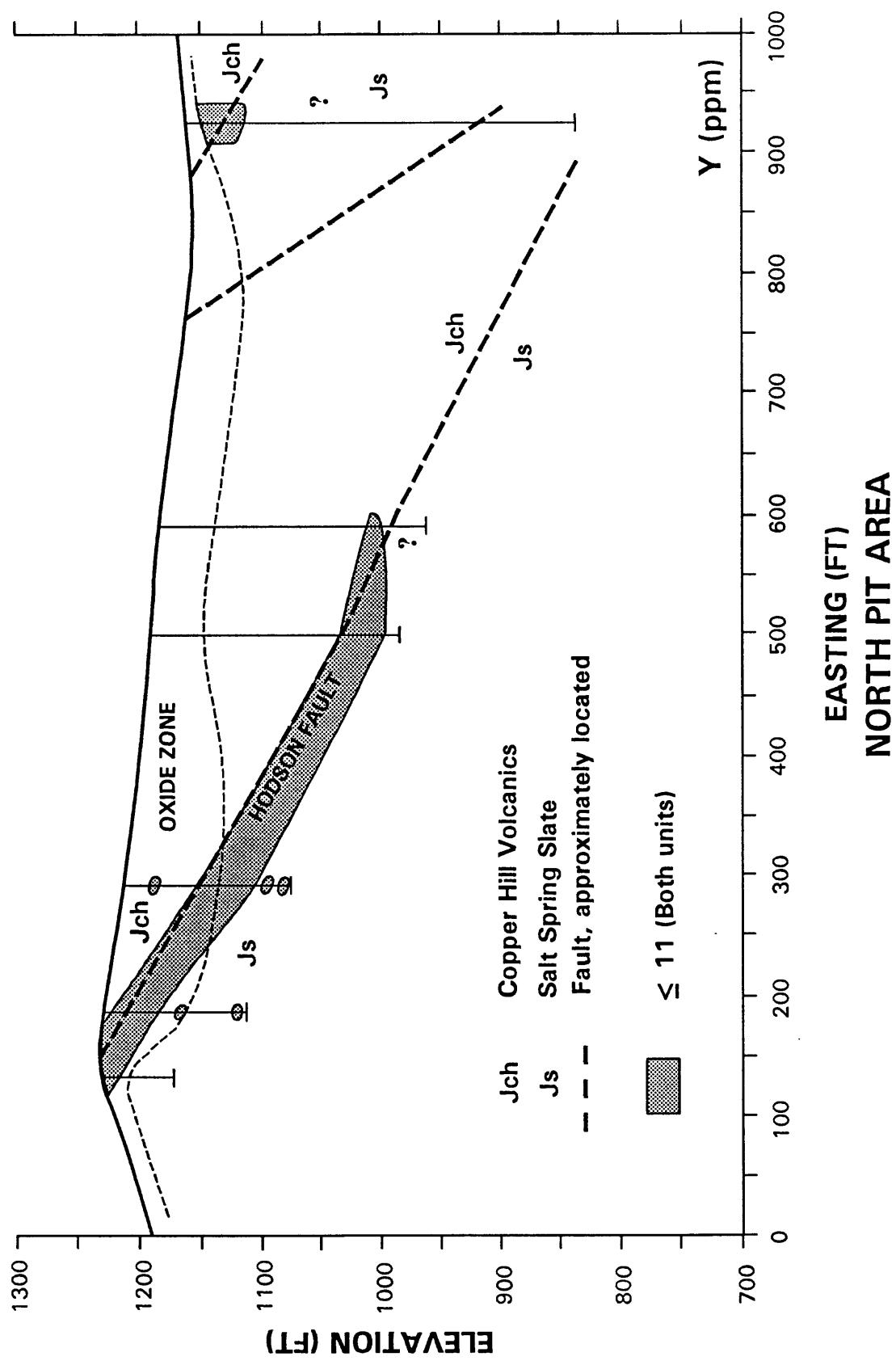
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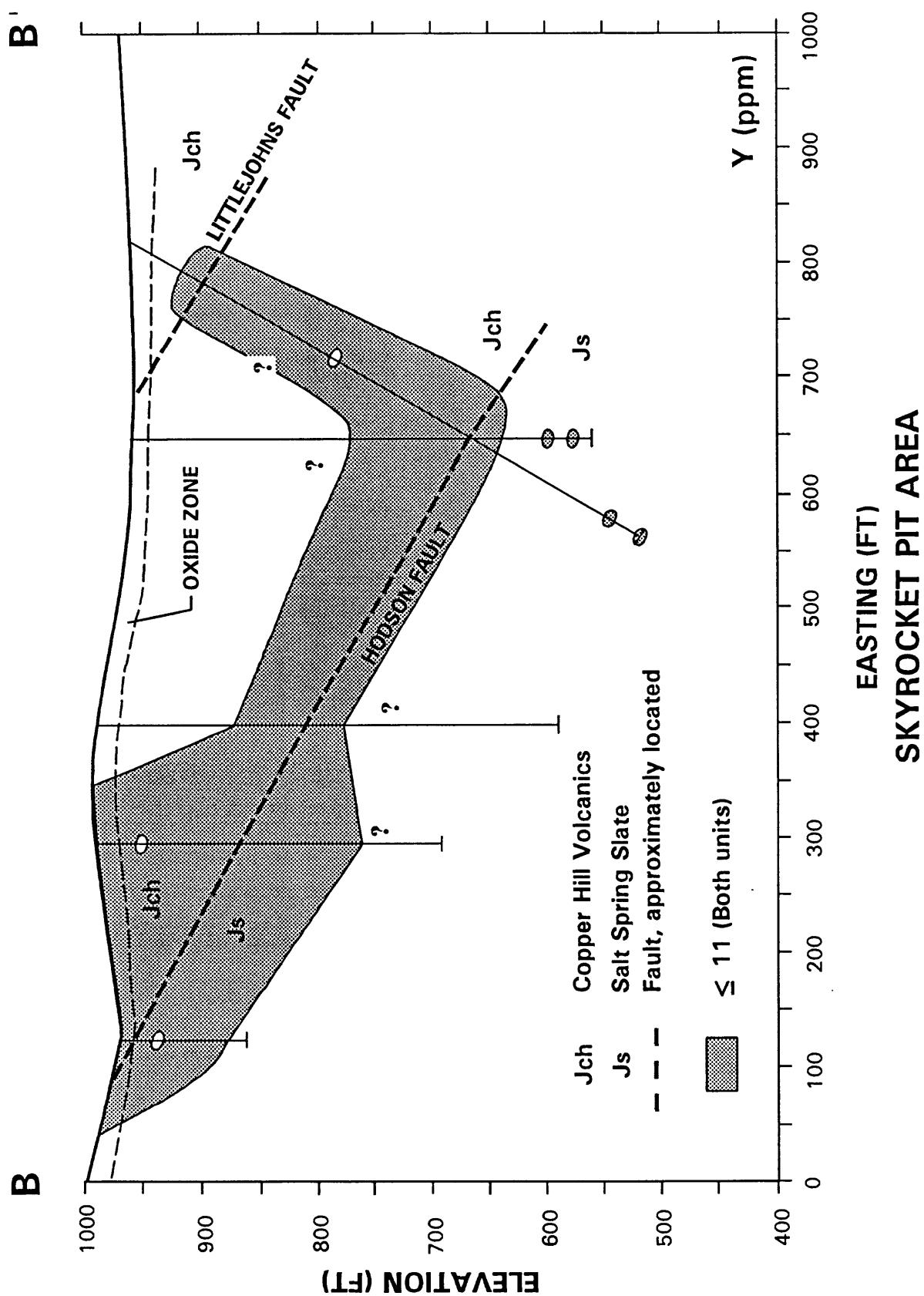


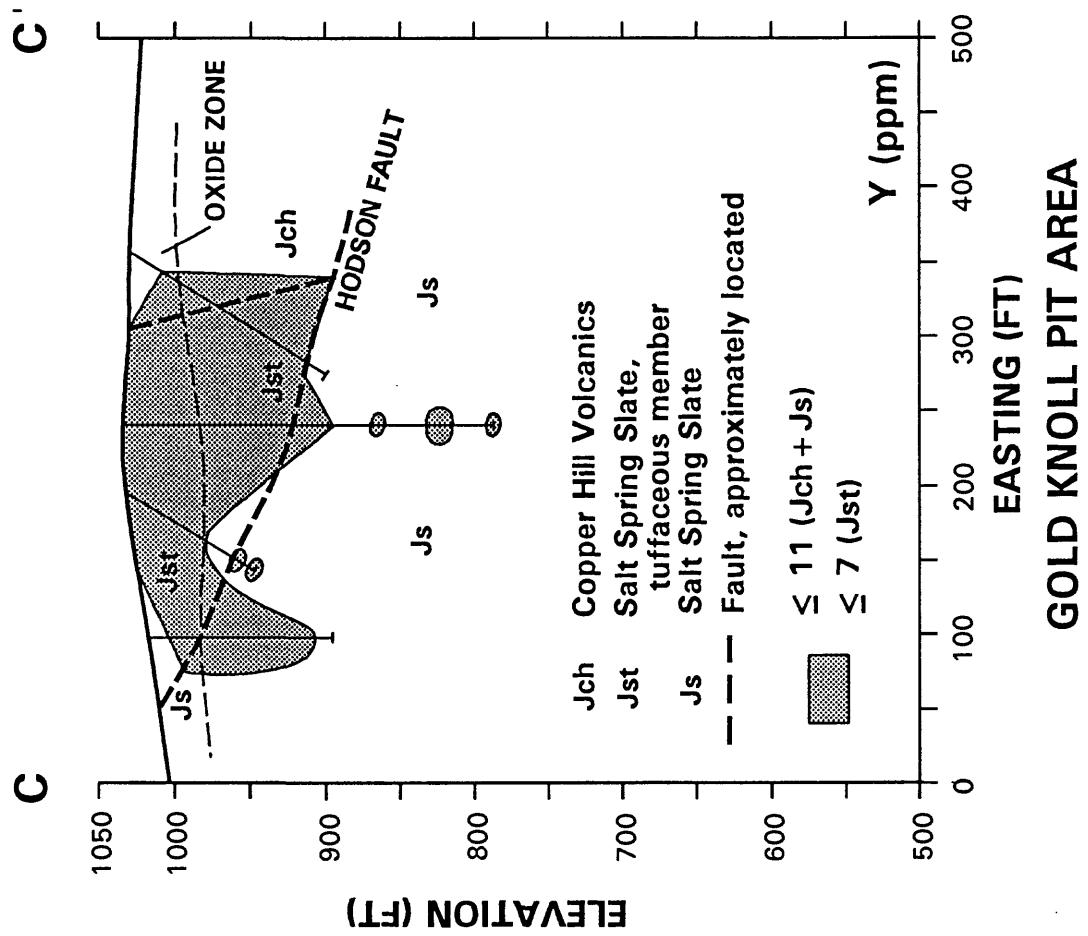


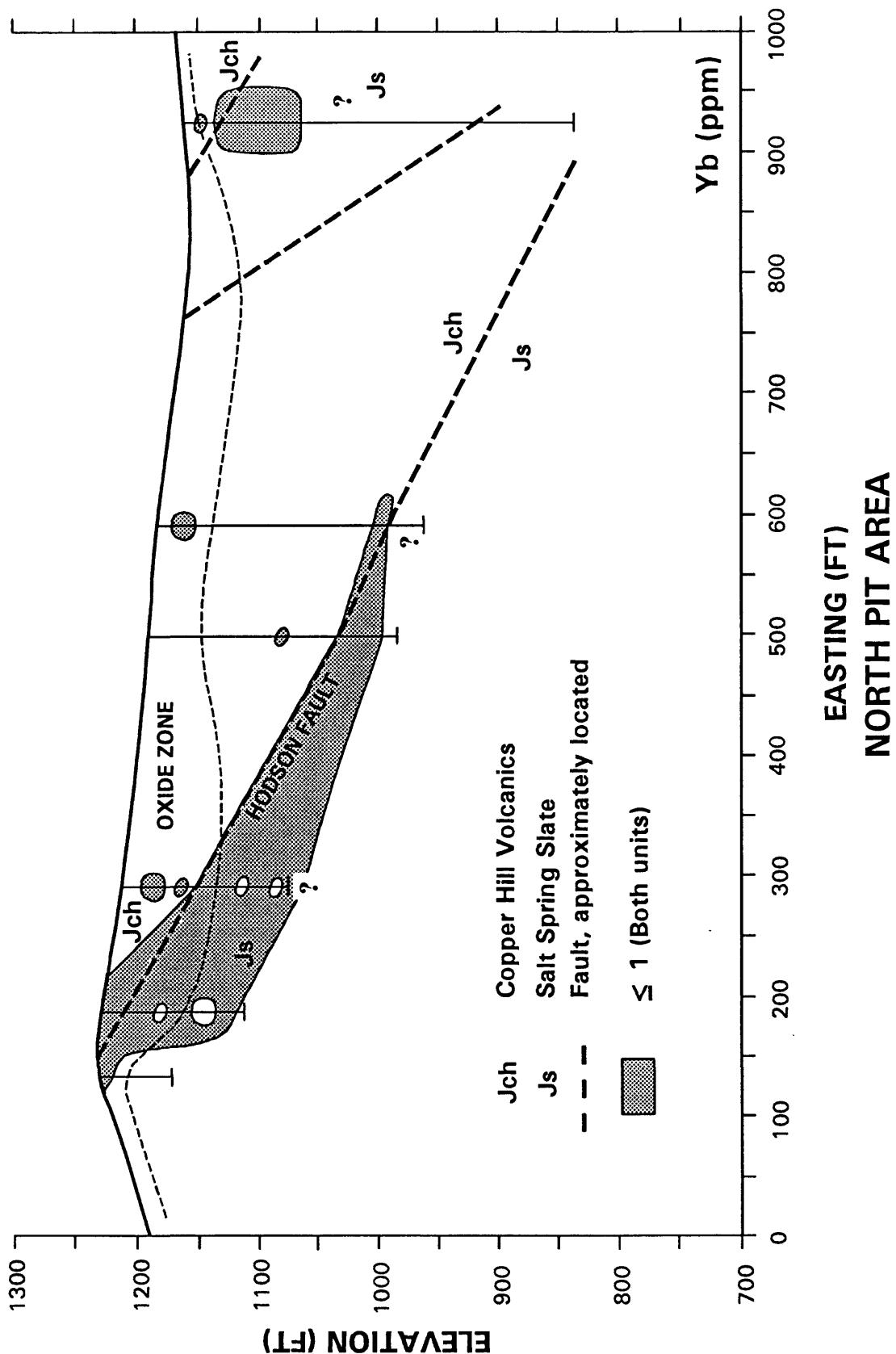
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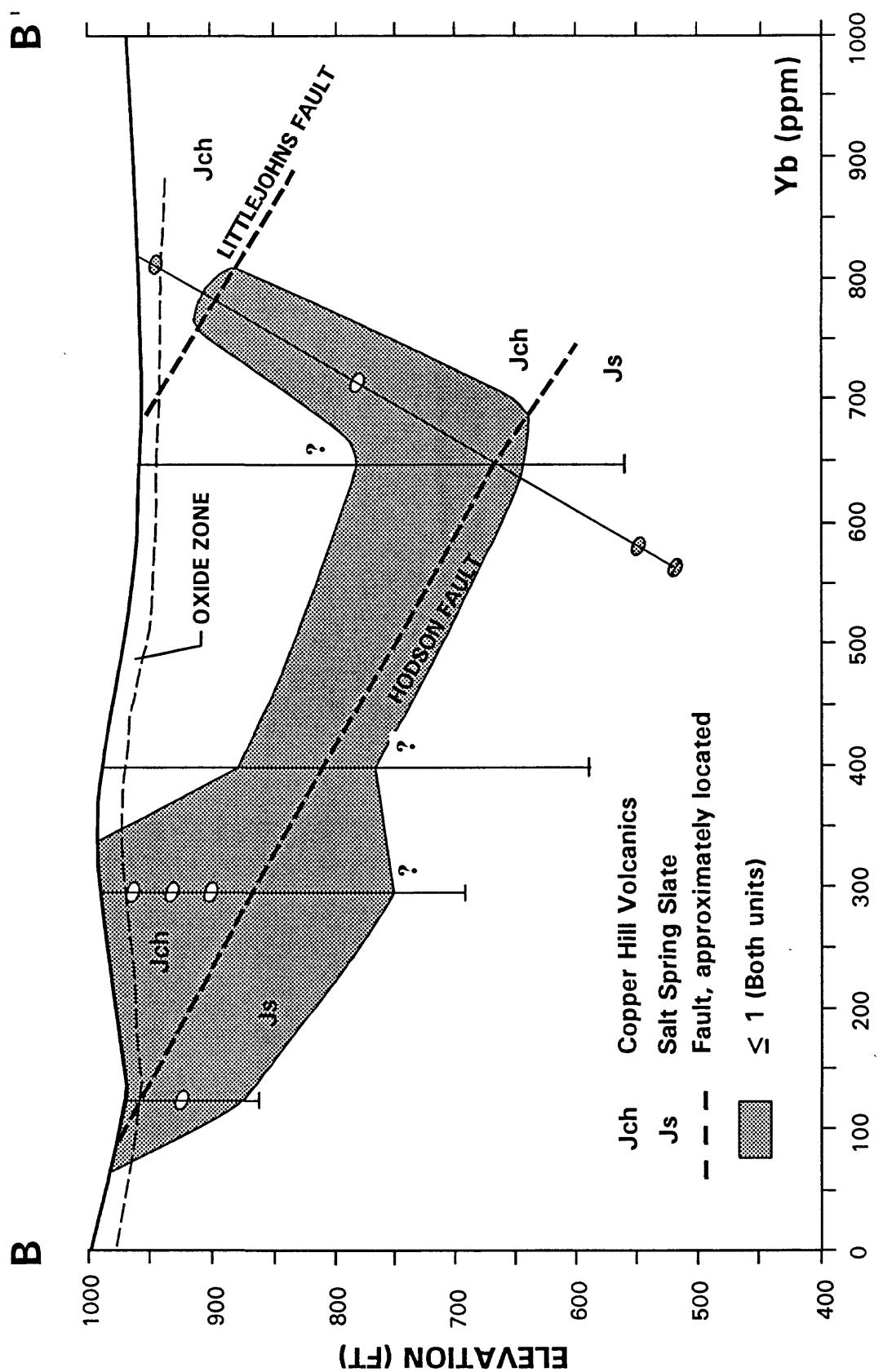


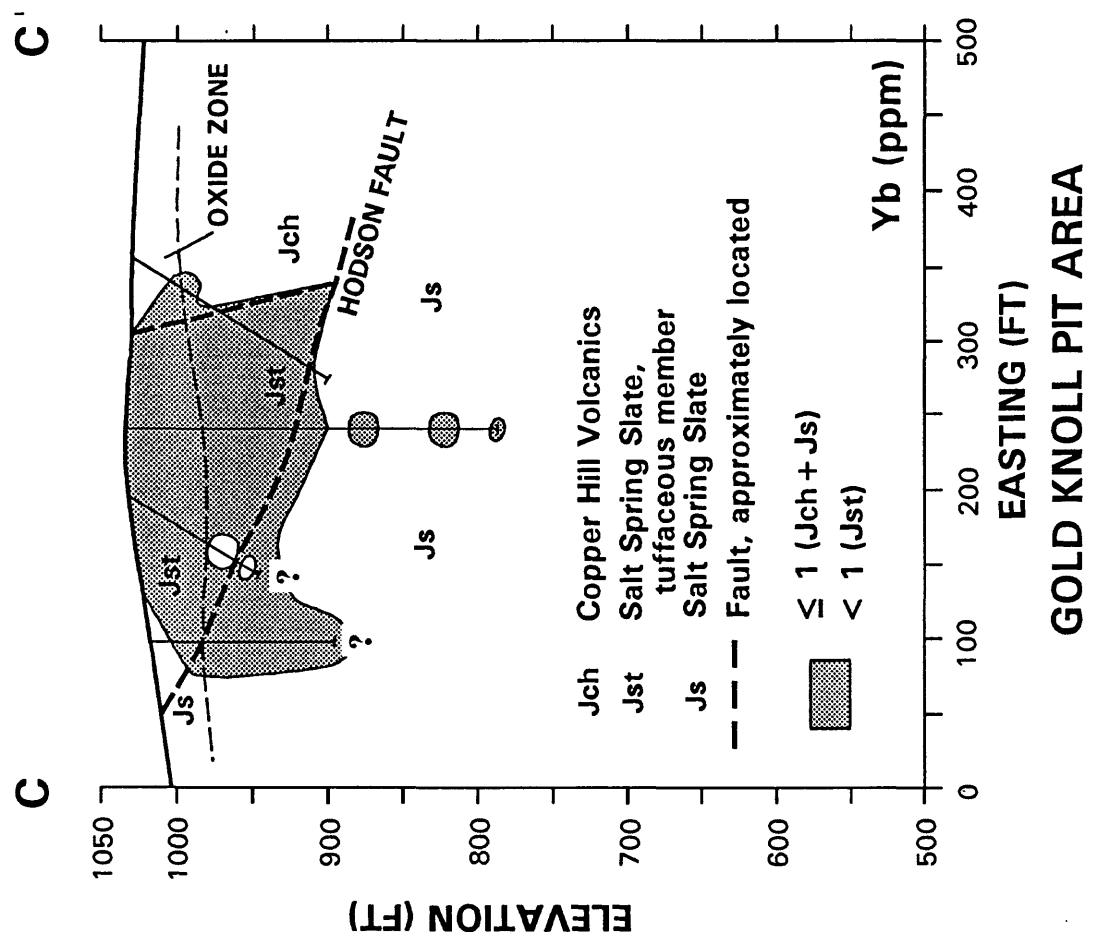


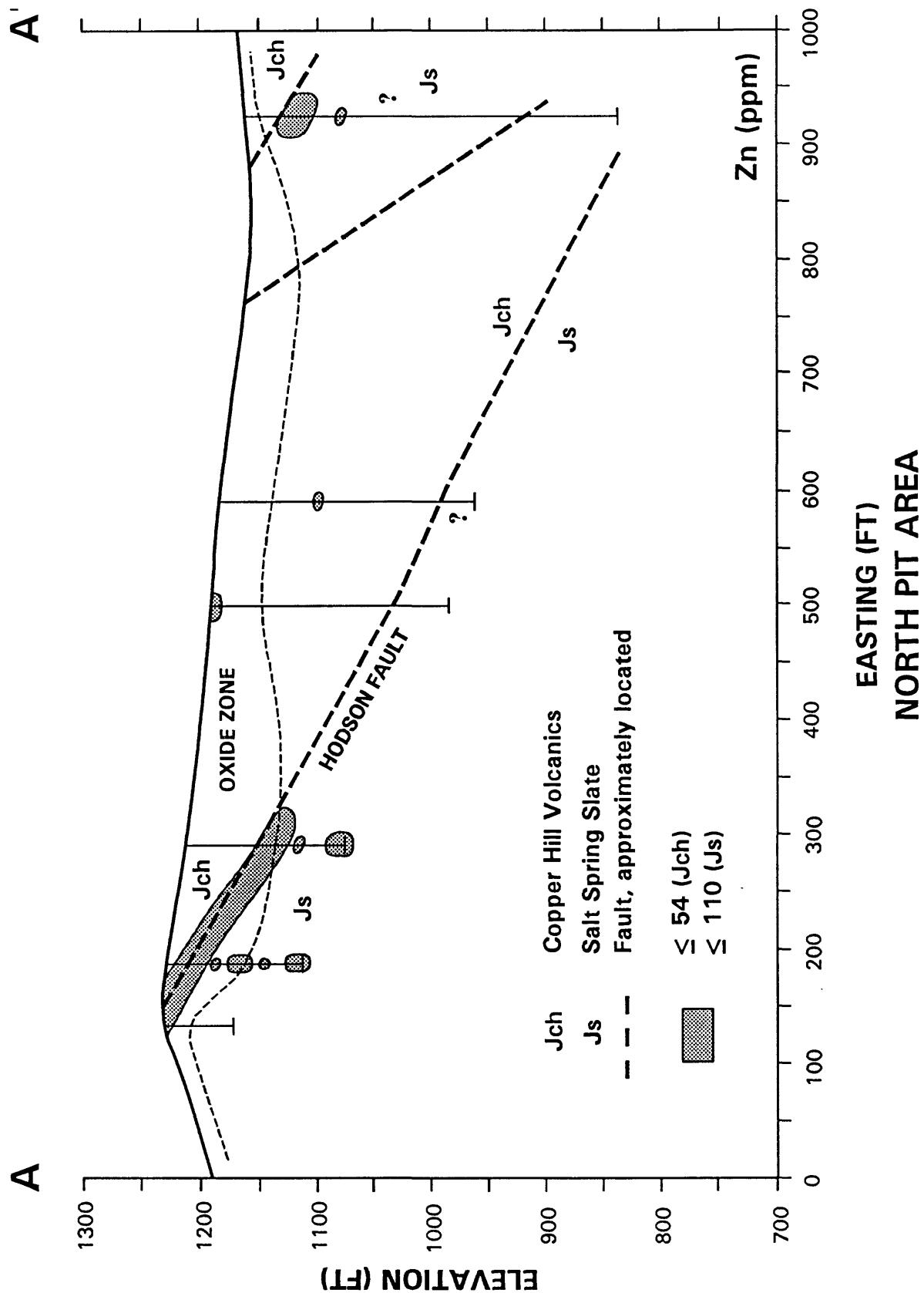


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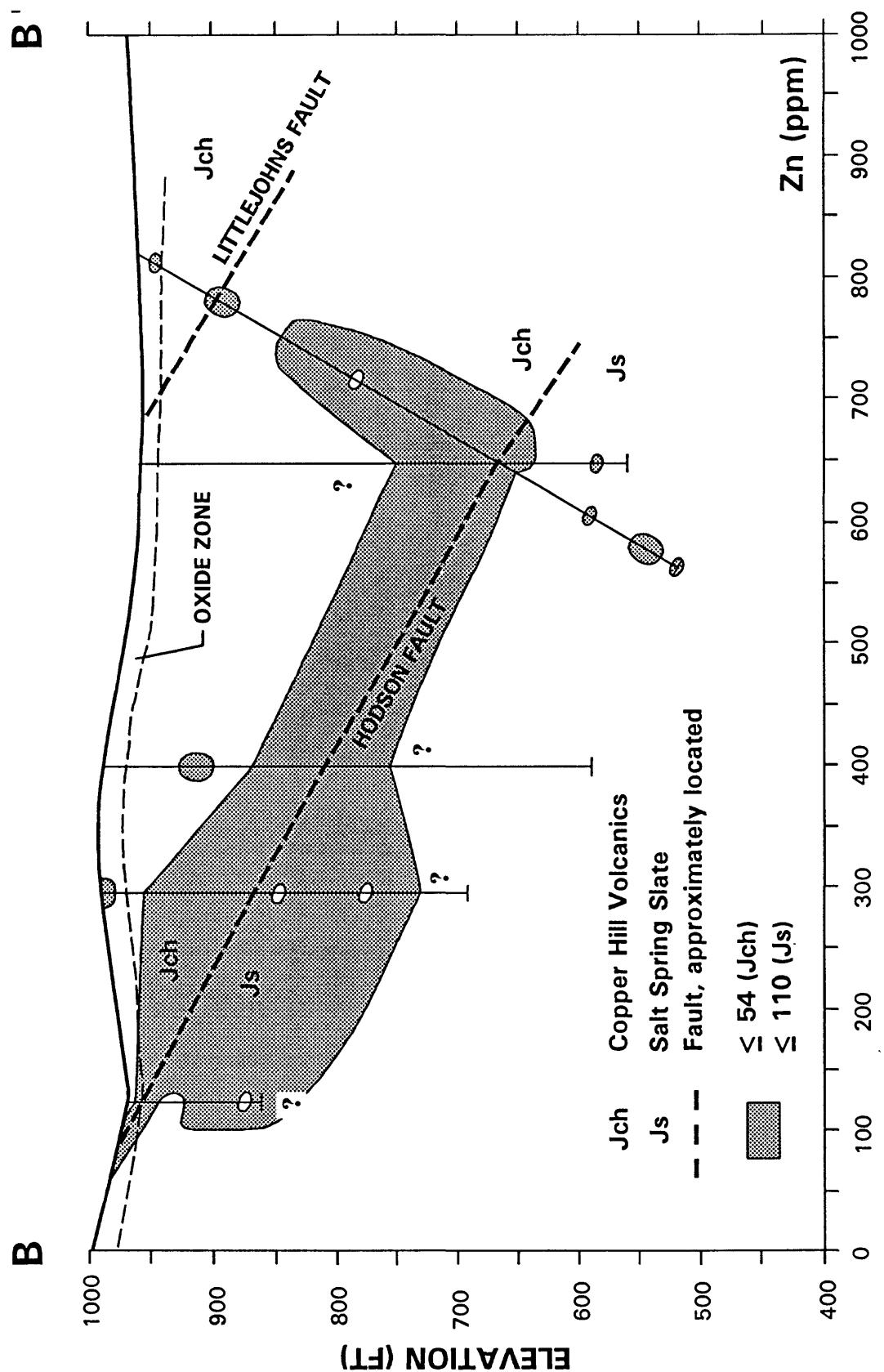
SKYROCKET PIT AREA

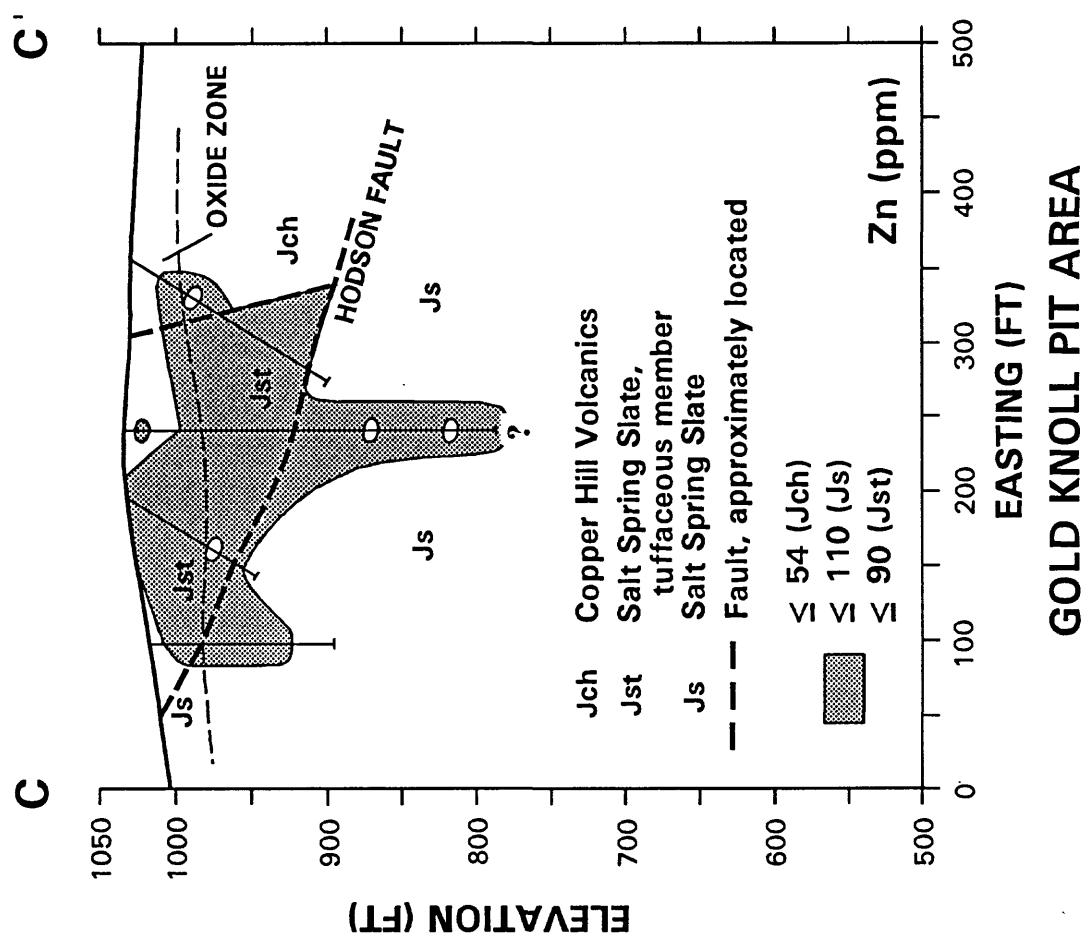


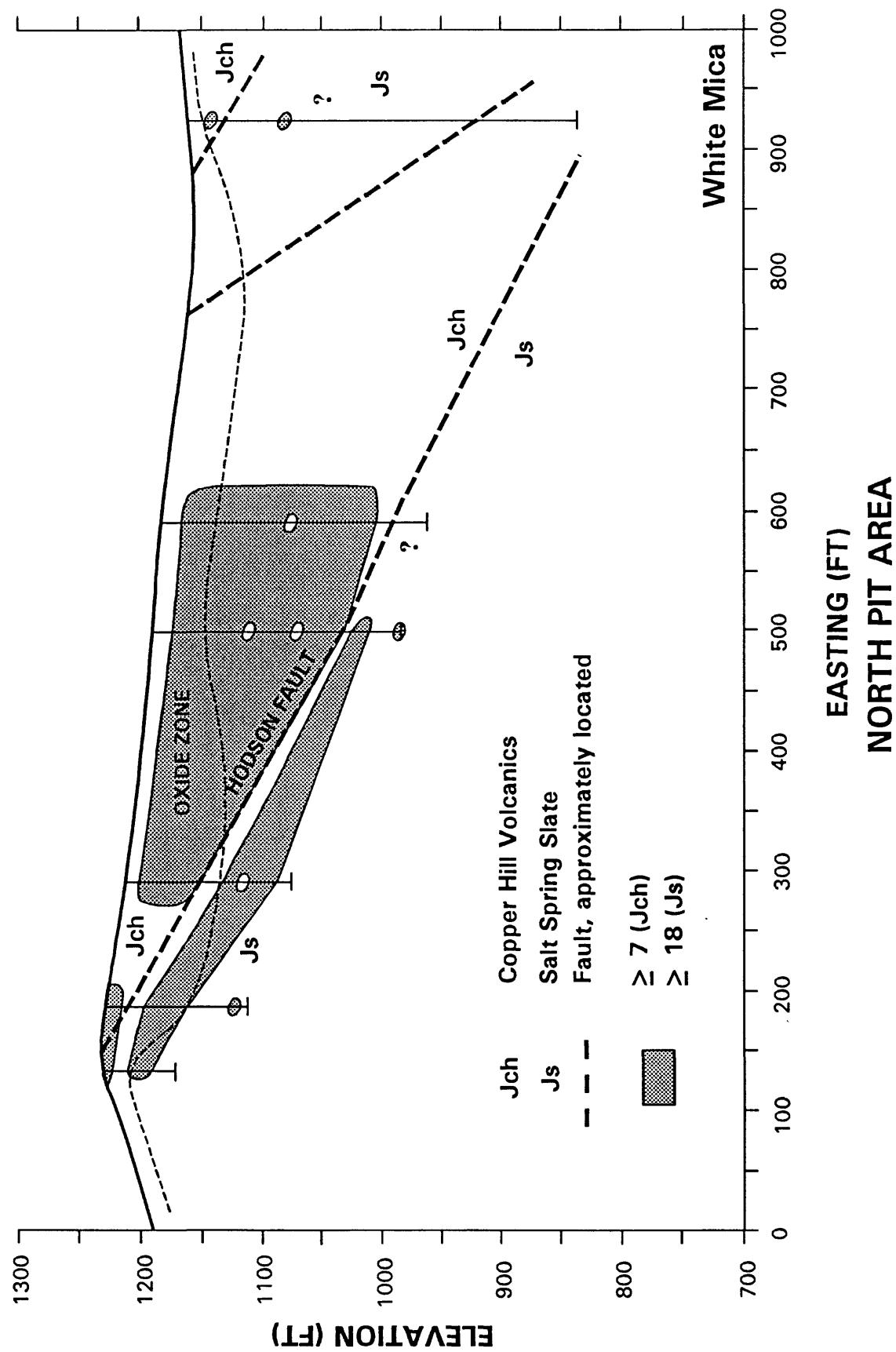


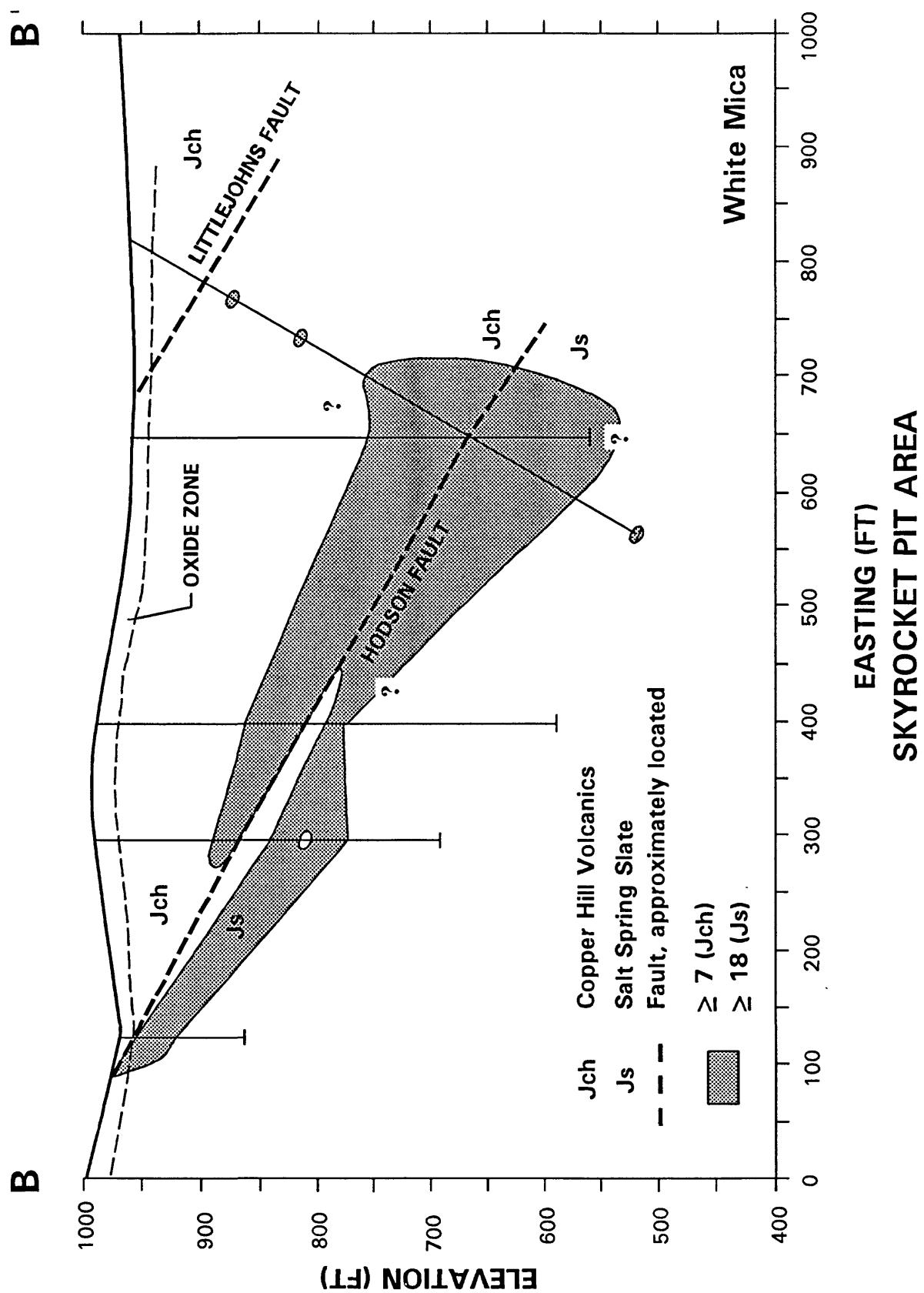
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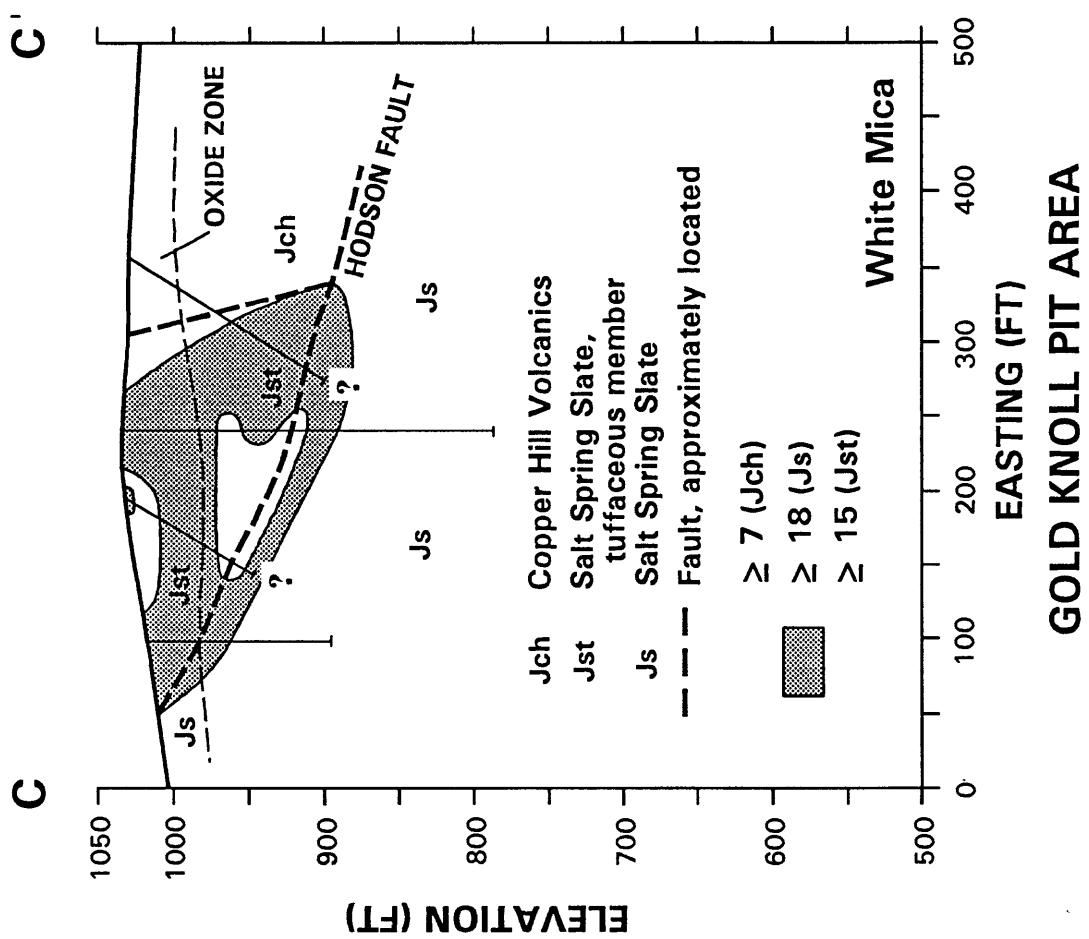
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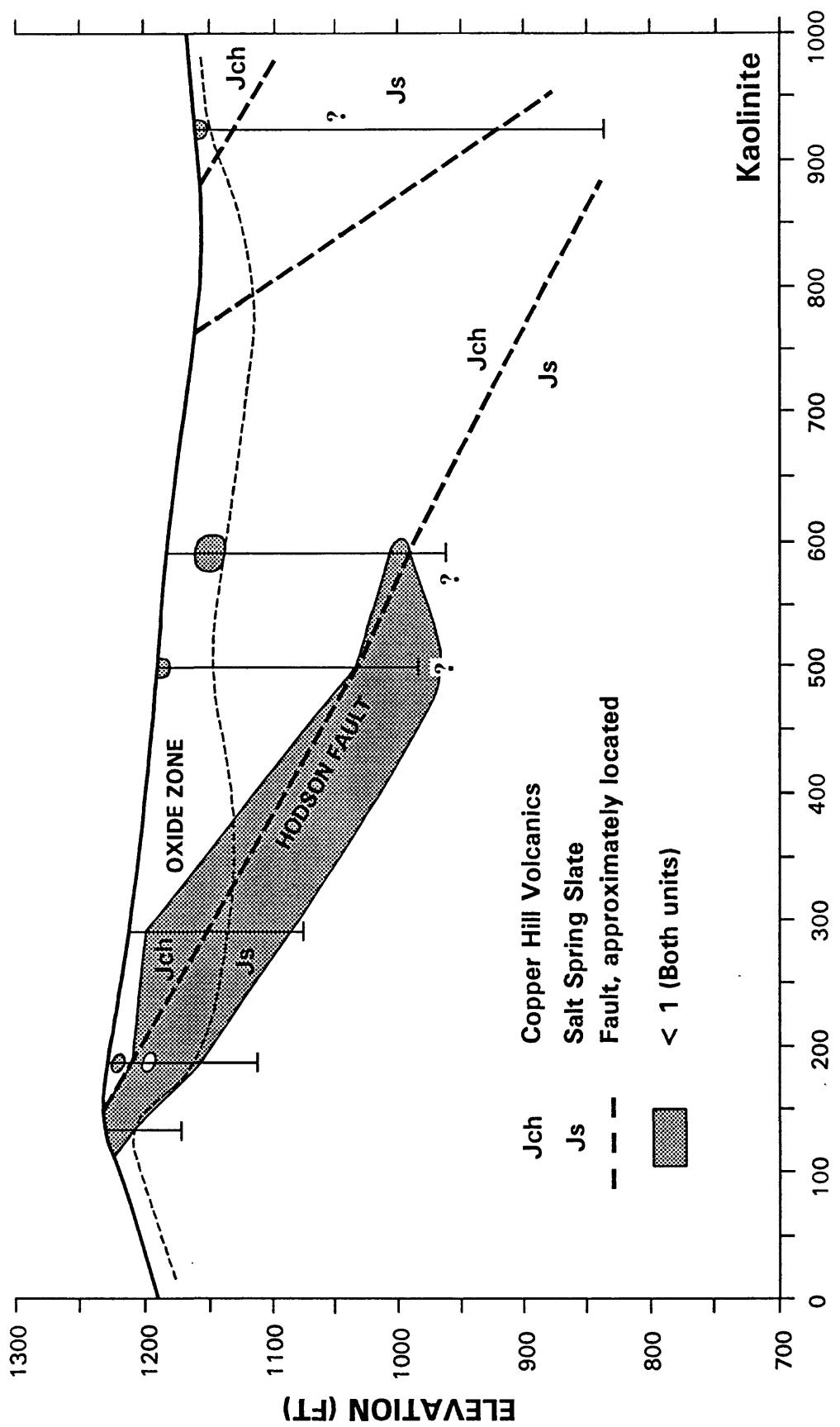




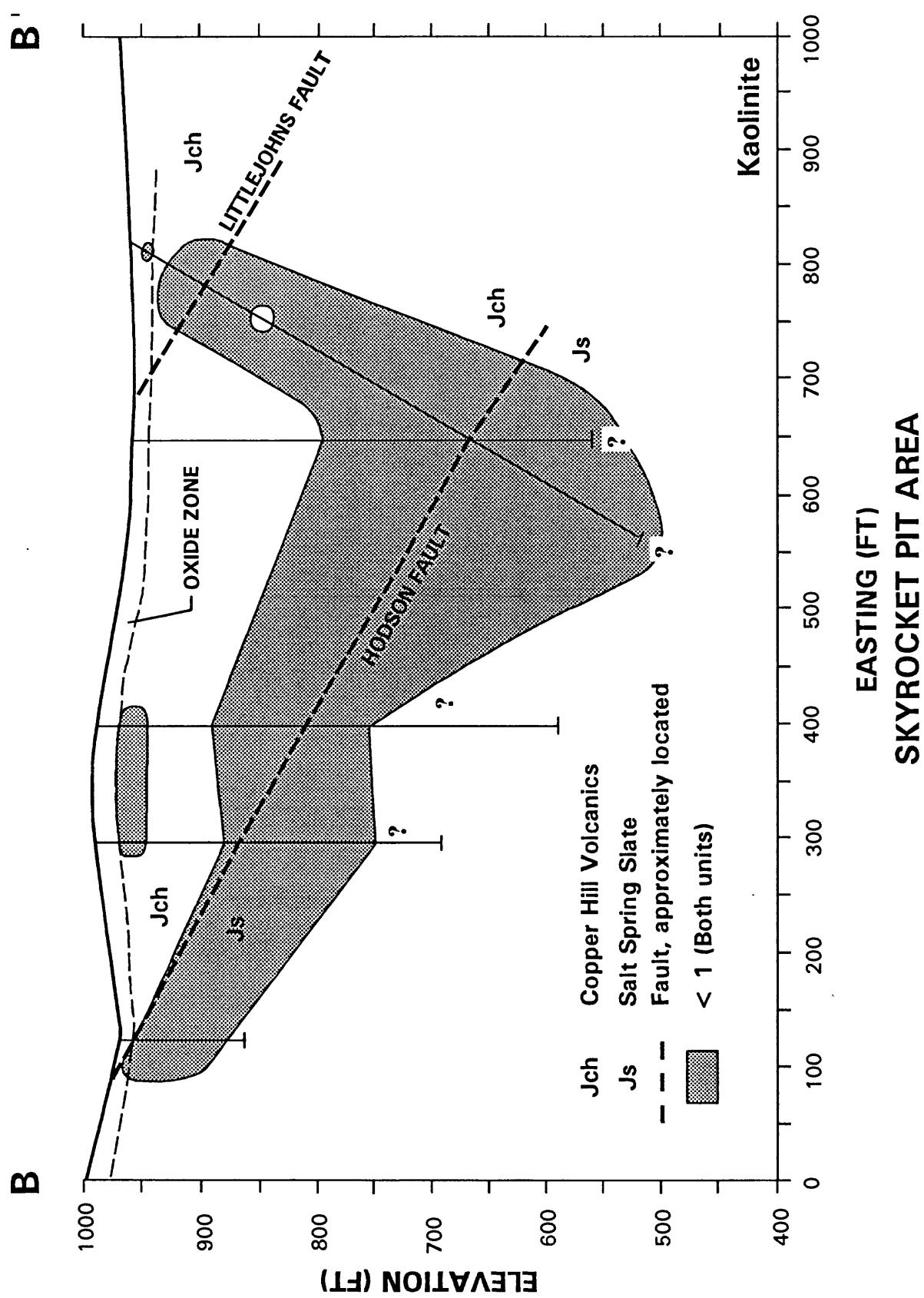
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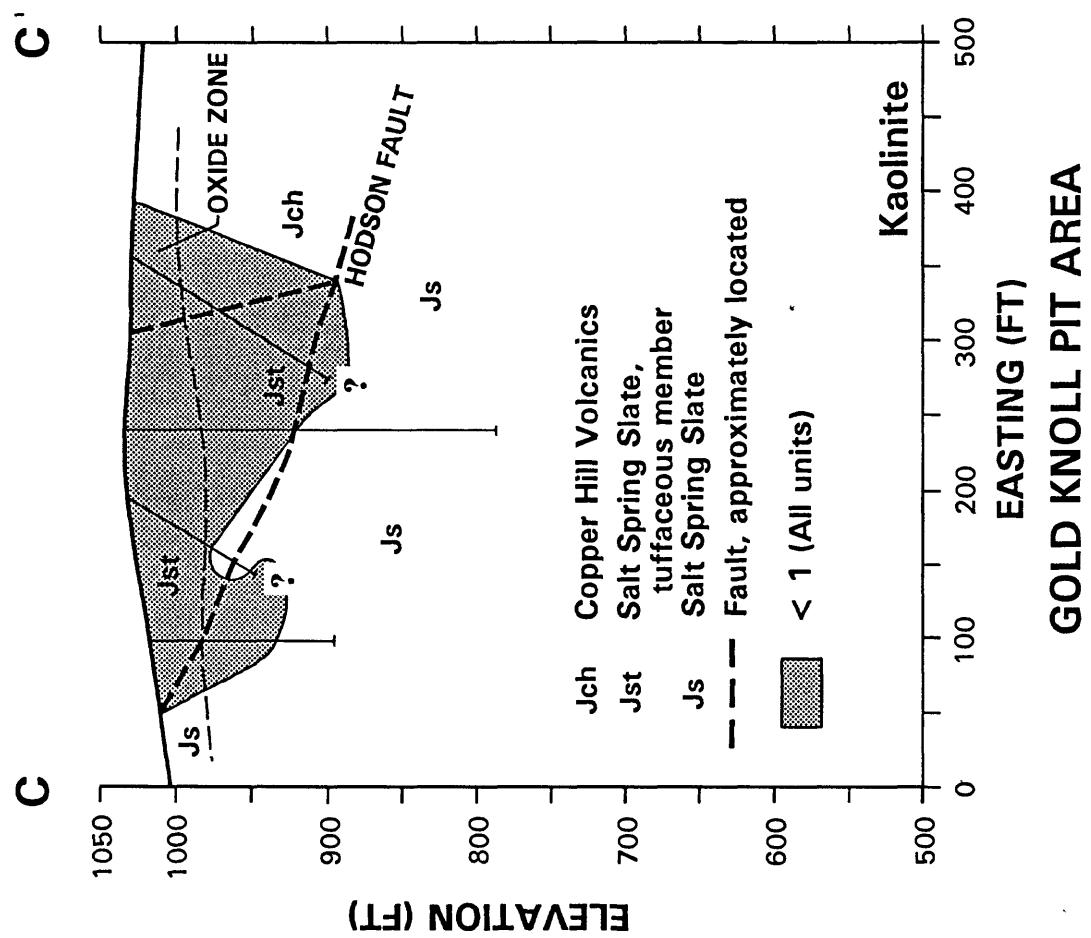




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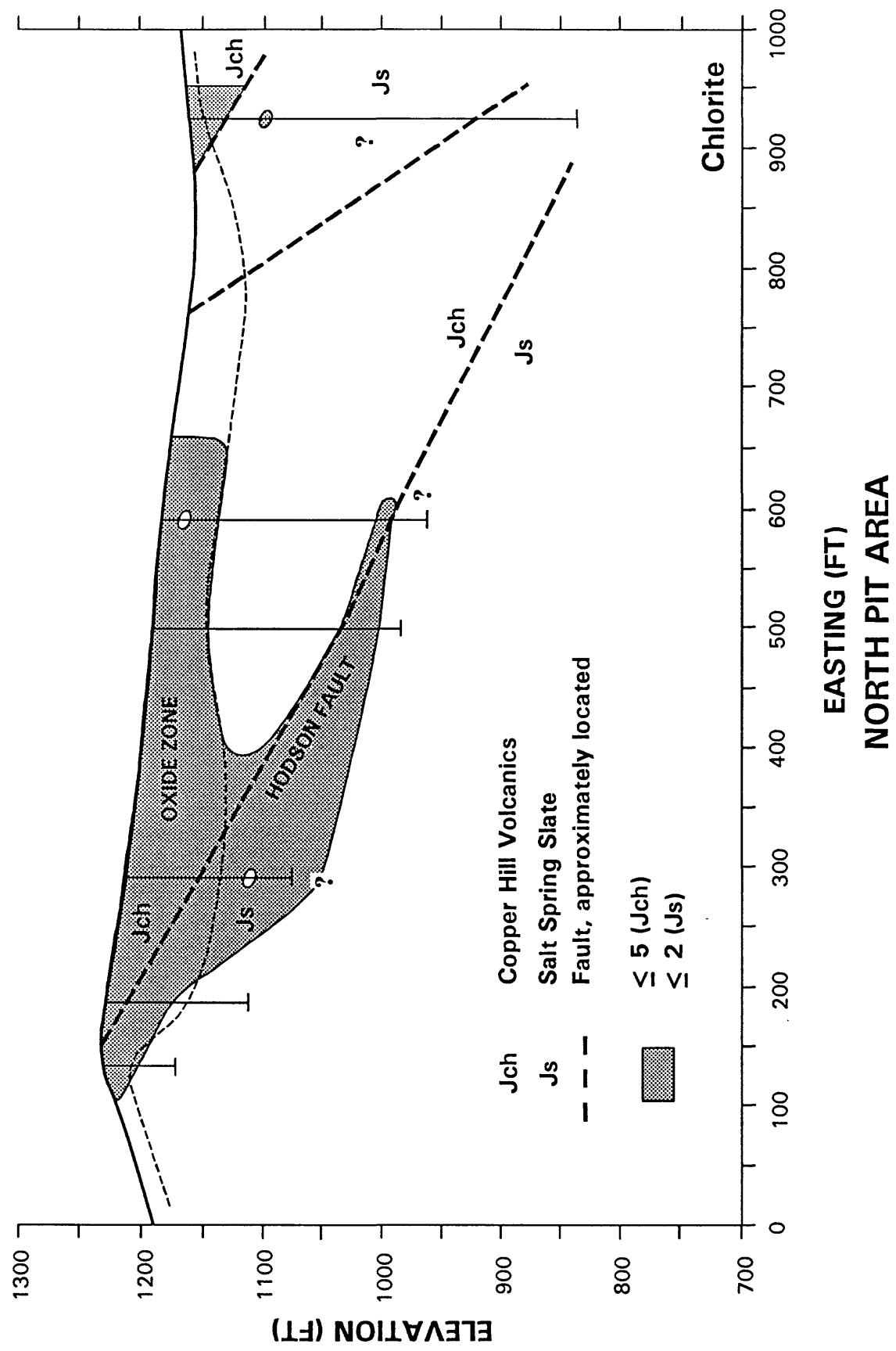
EASTING (FT)
NORTH PIT AREA

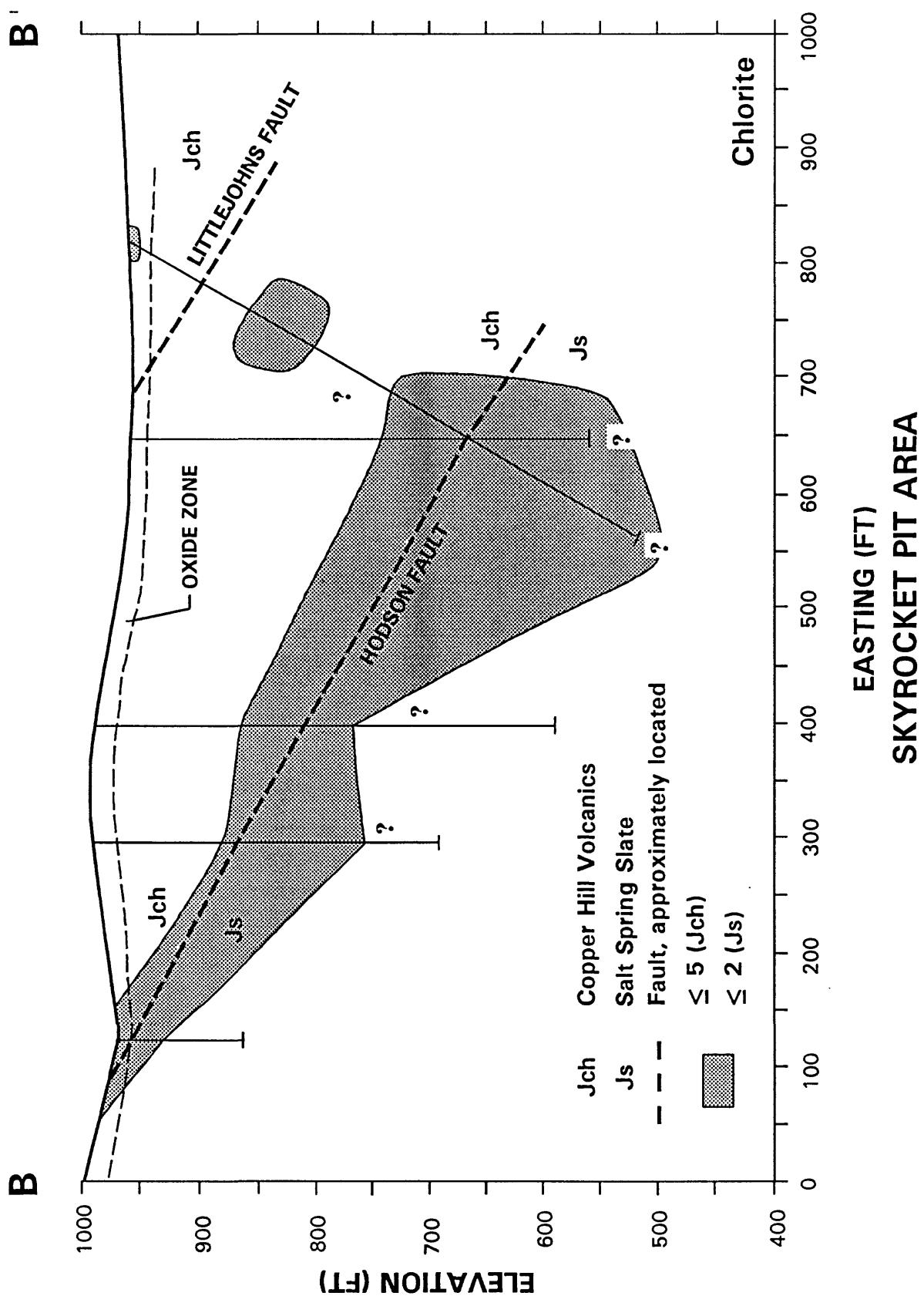


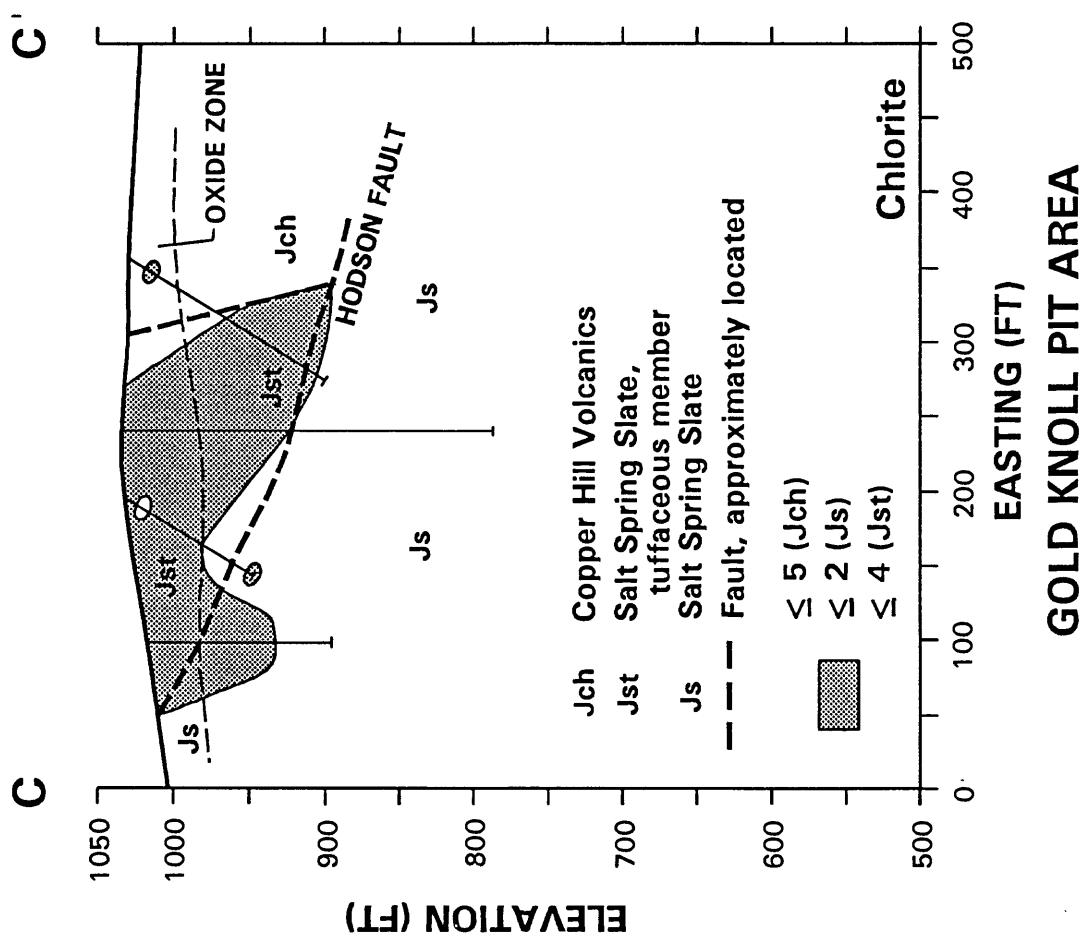


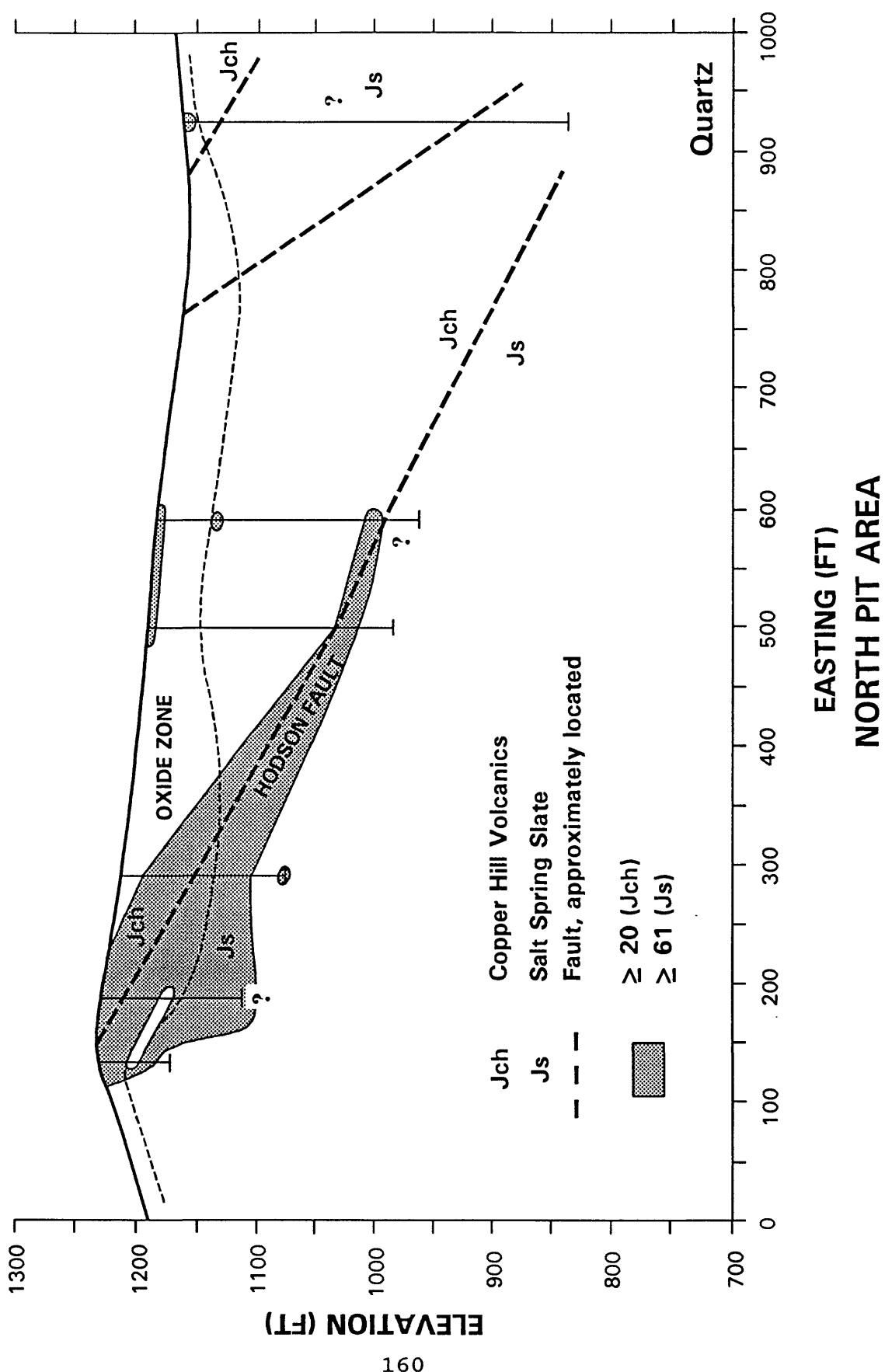
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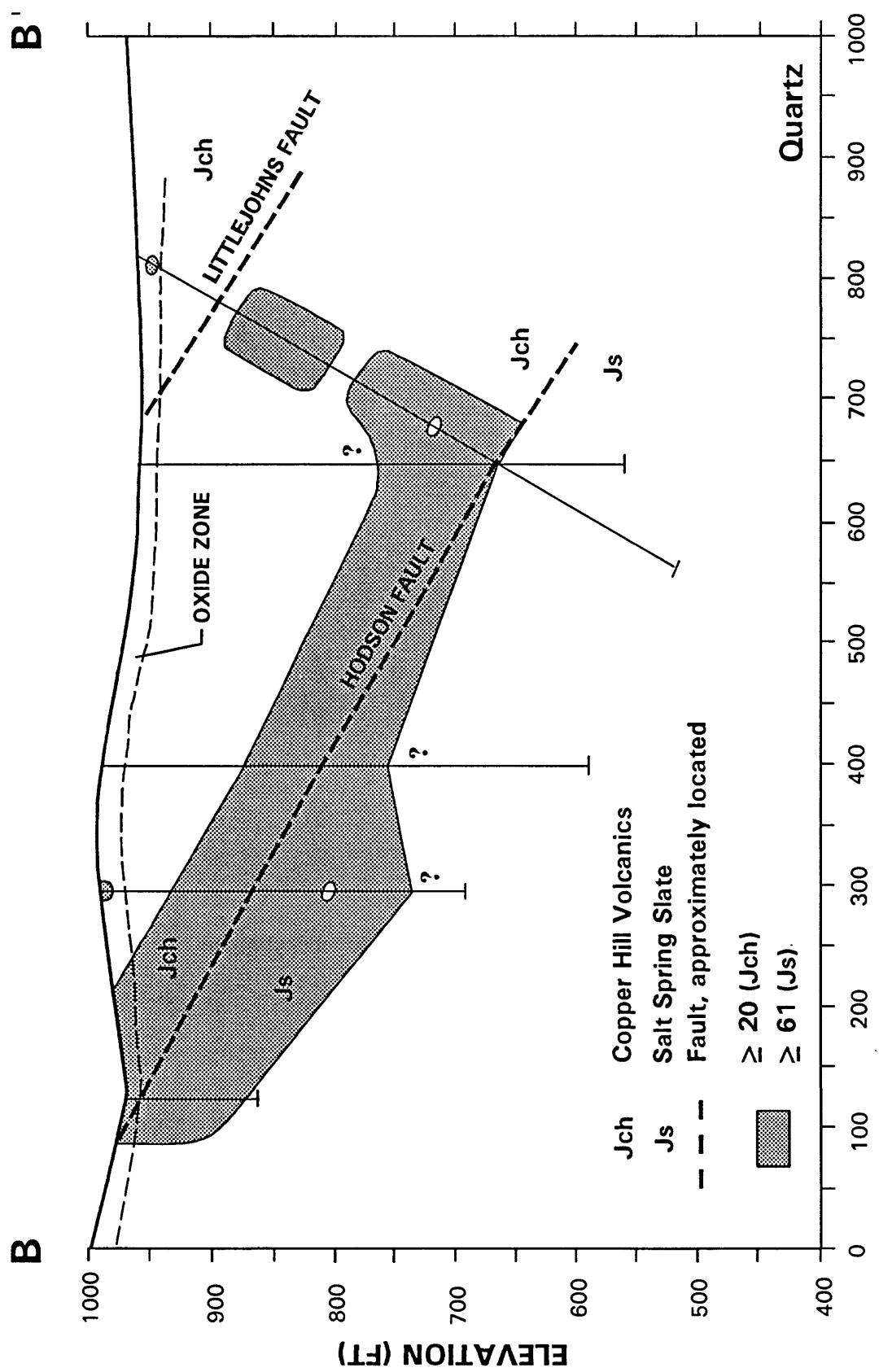


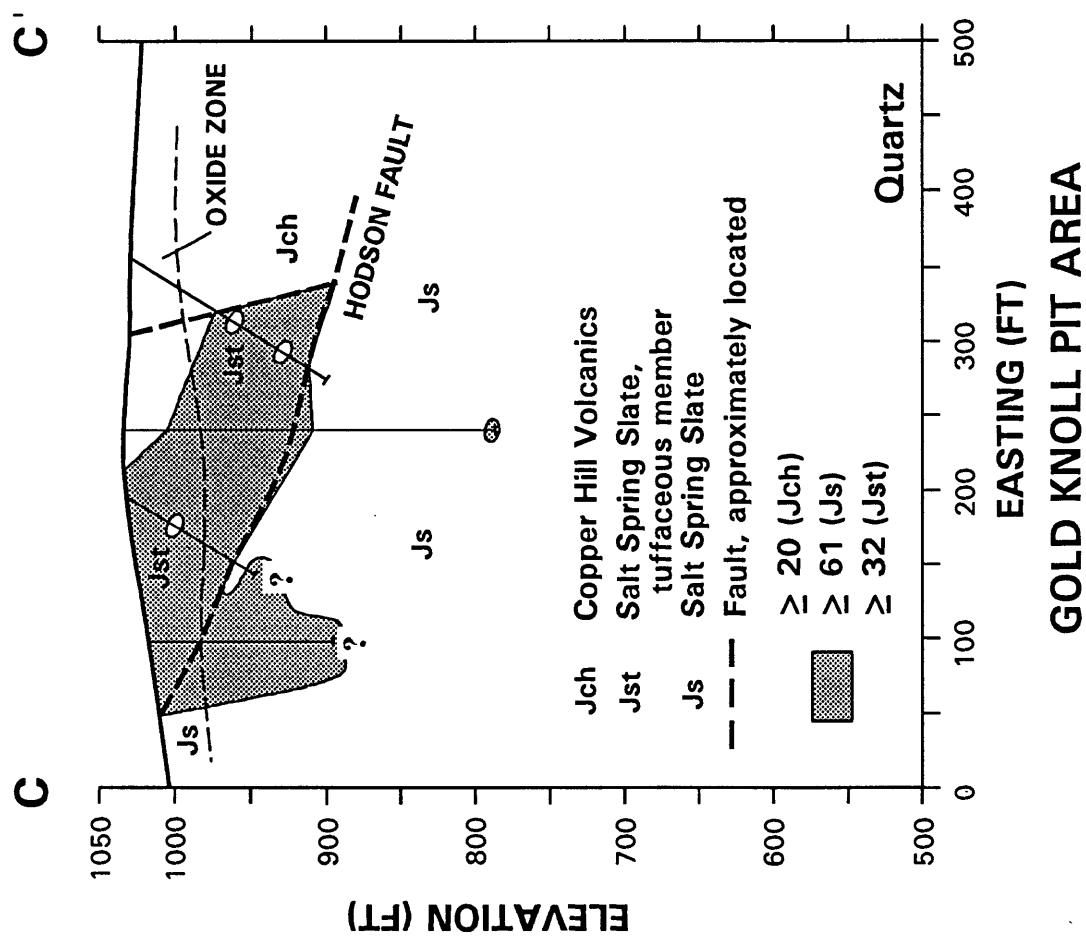


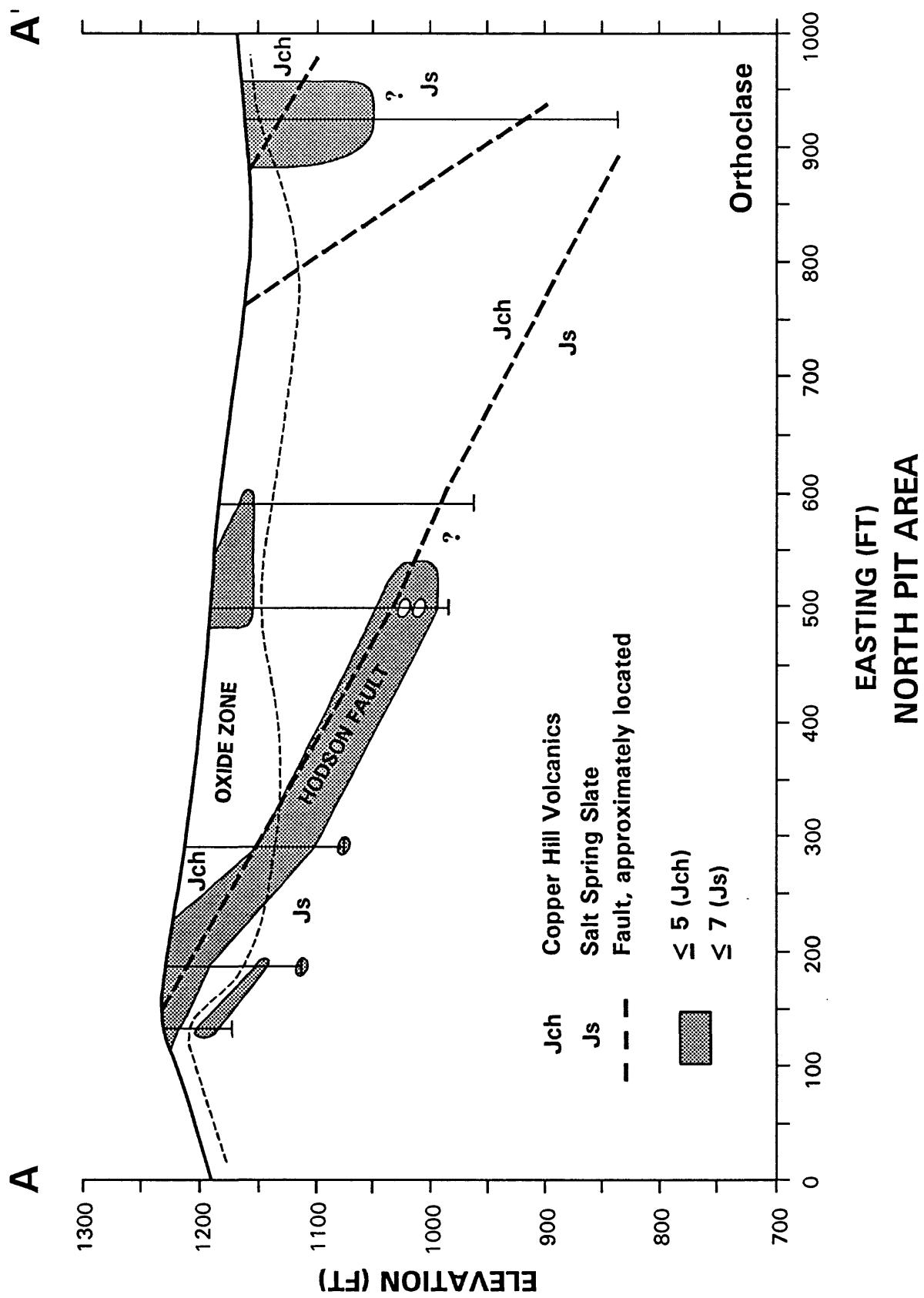


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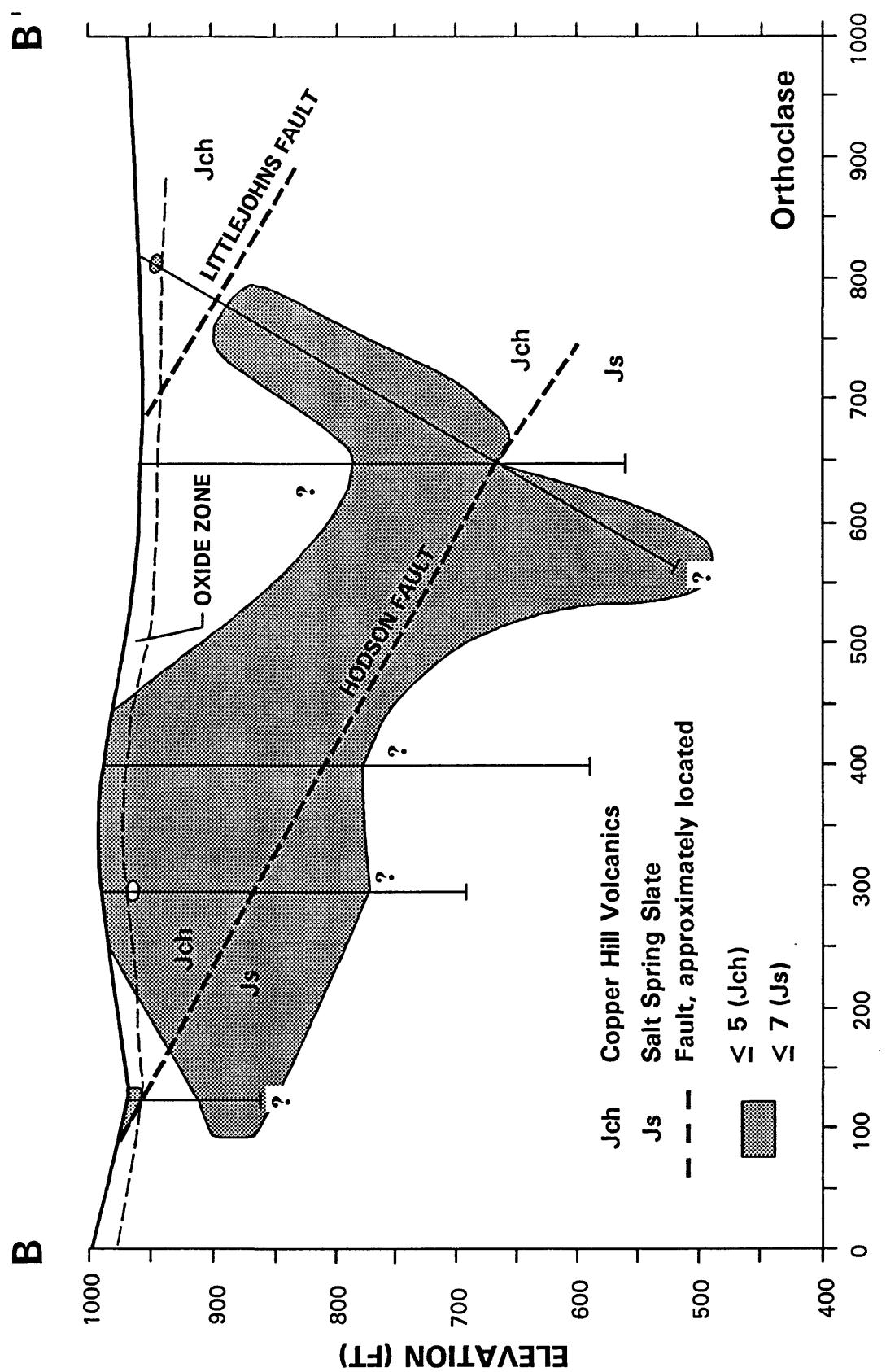
**EASTING (FT)
SKYROCKET PIT AREA**

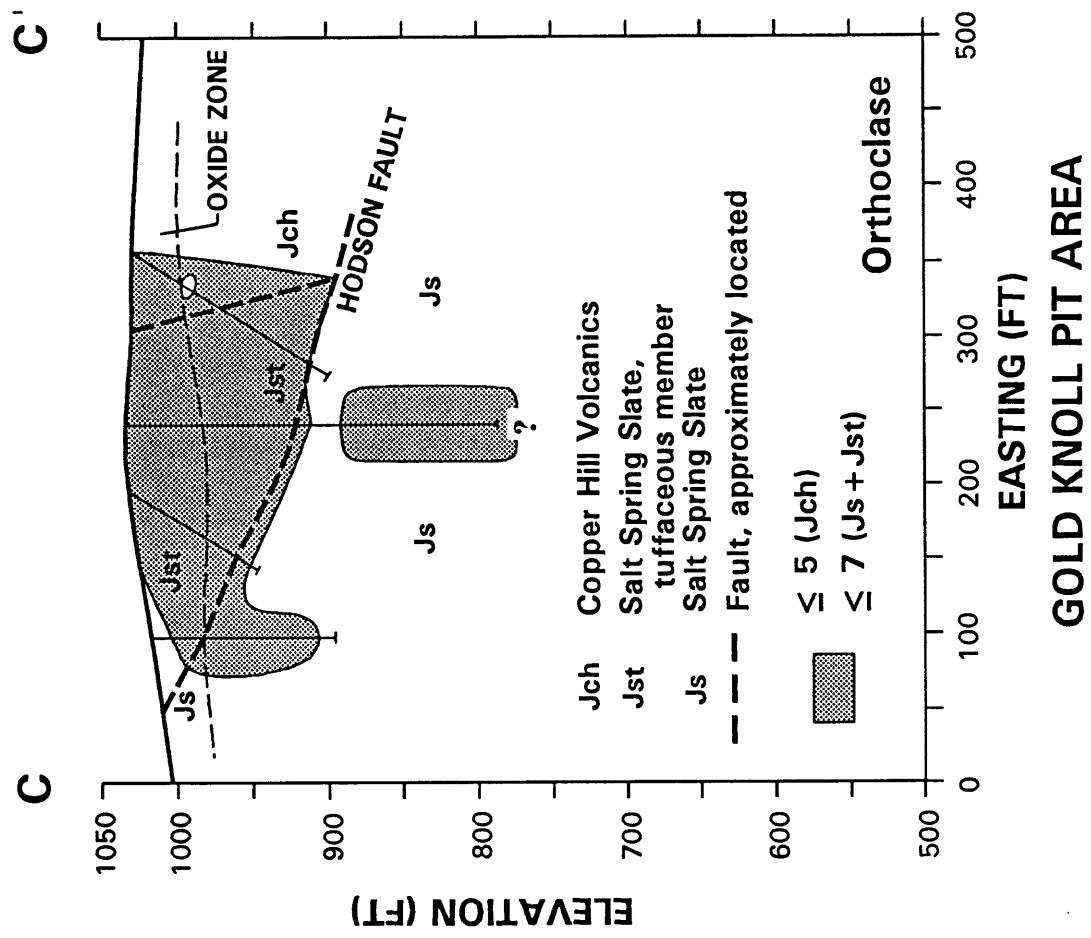


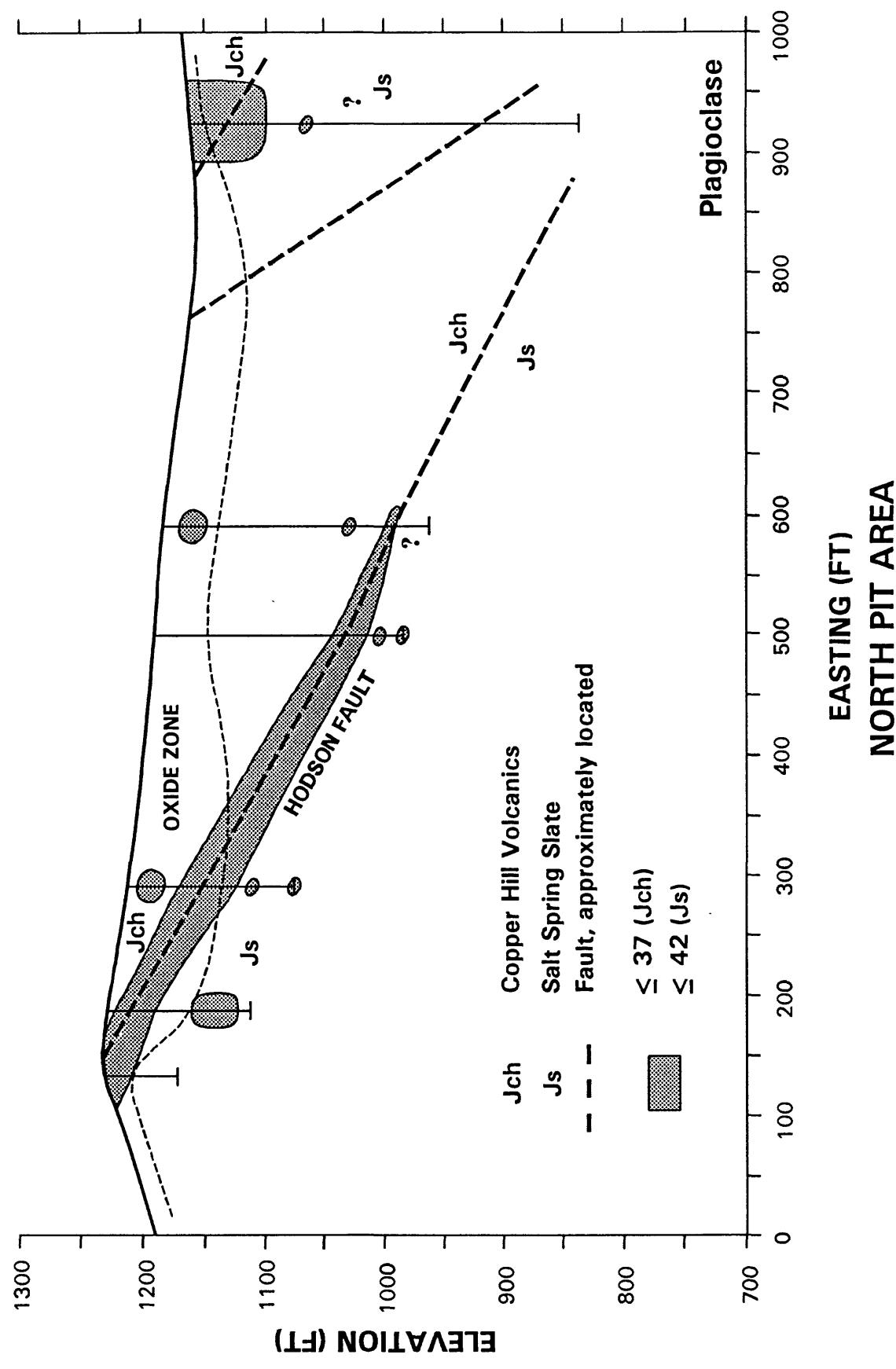


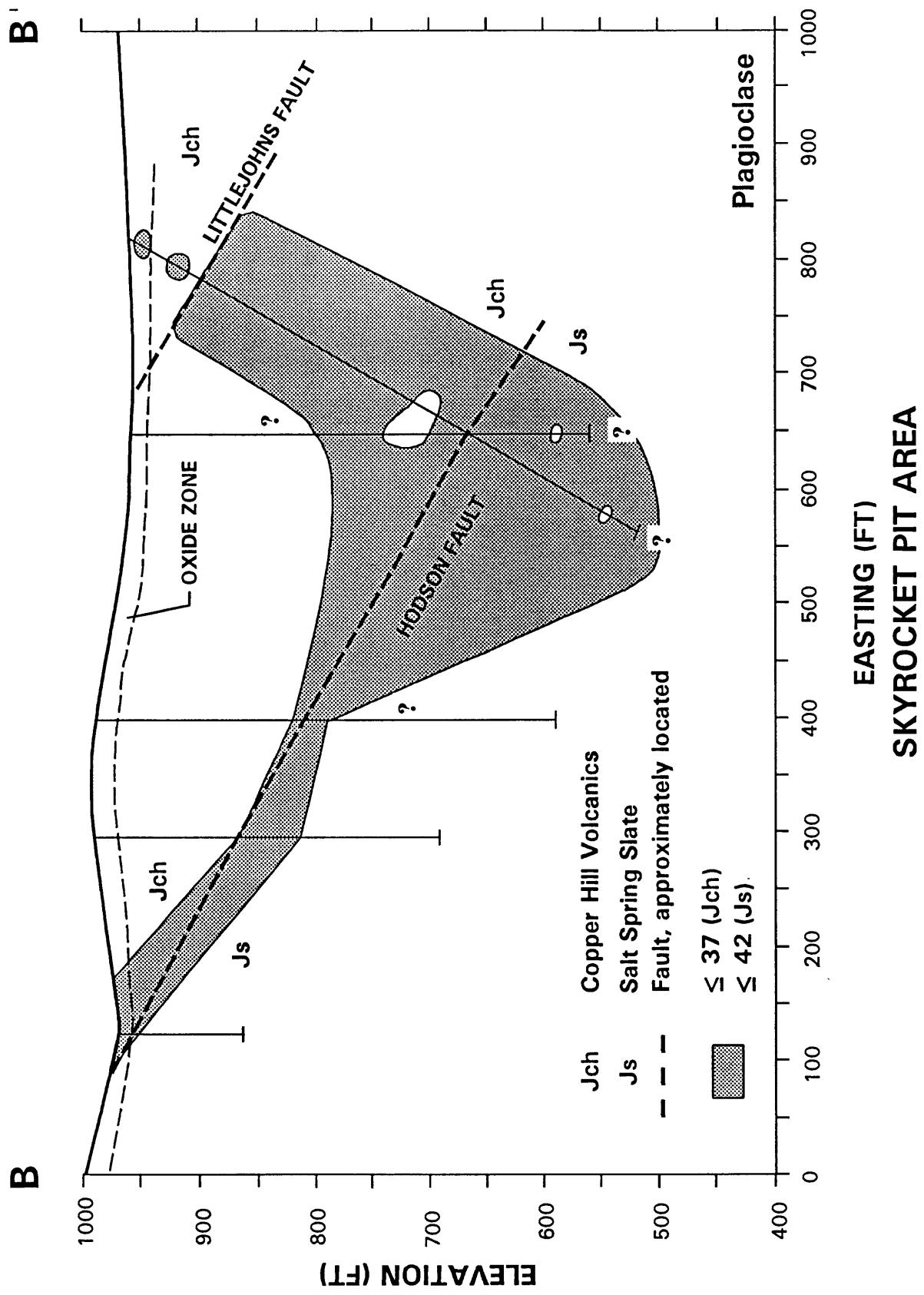


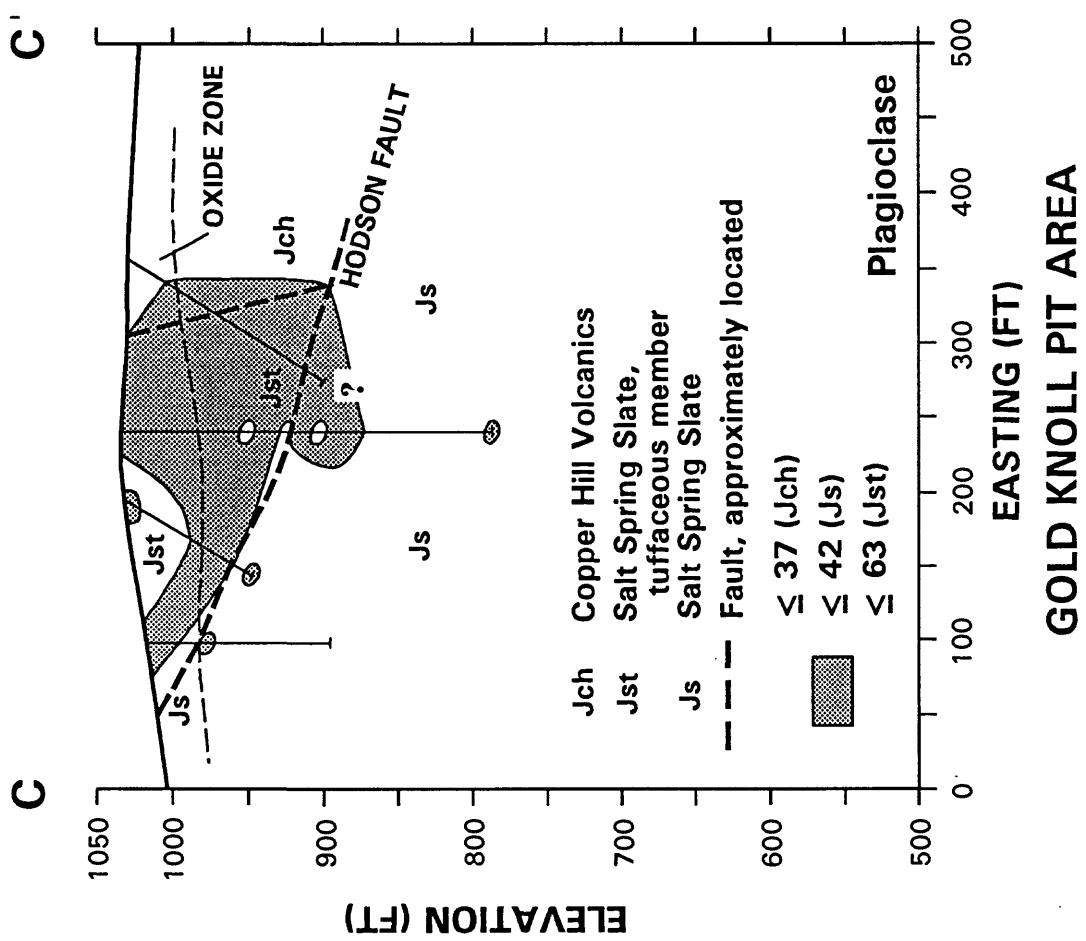
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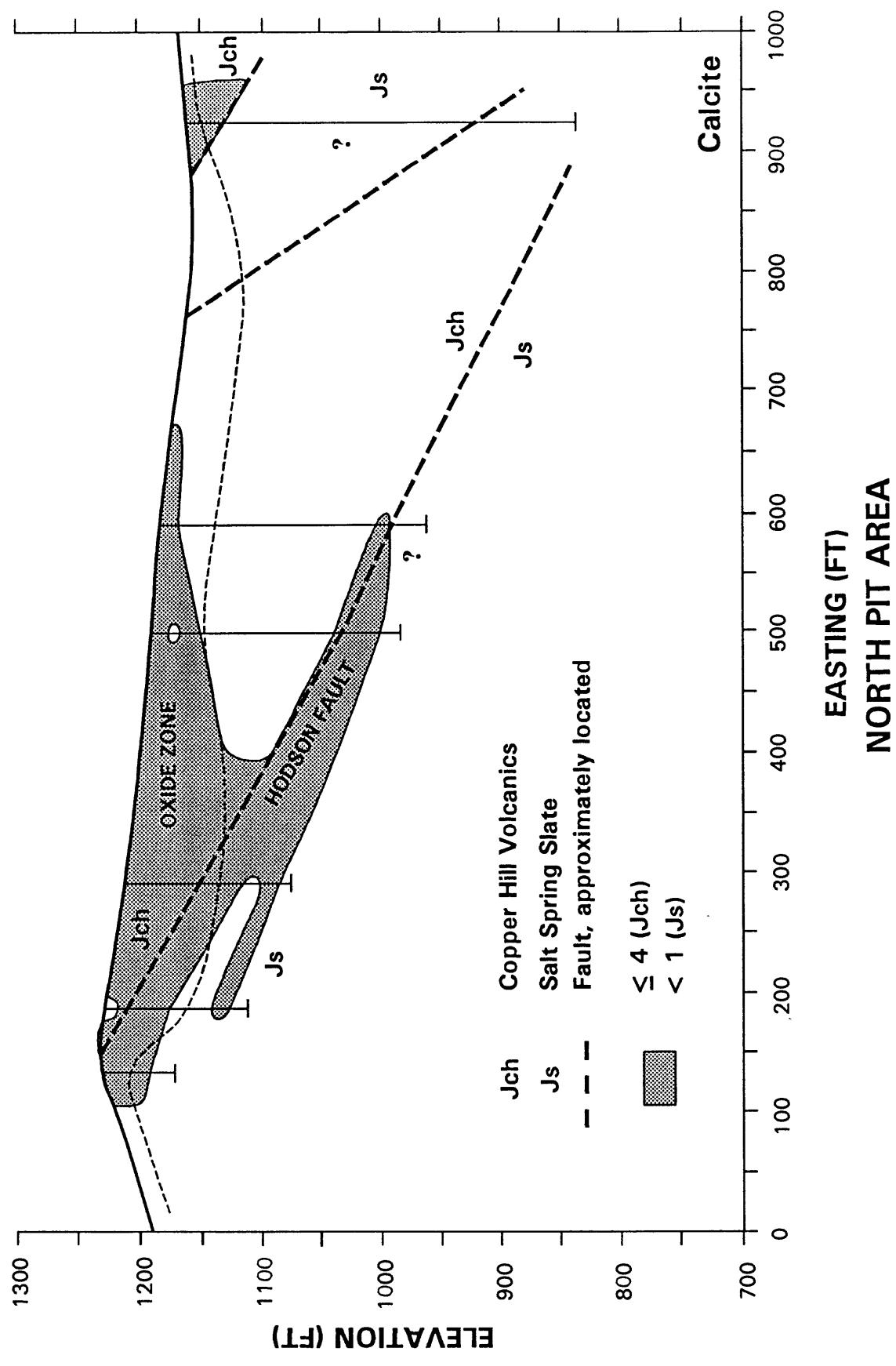


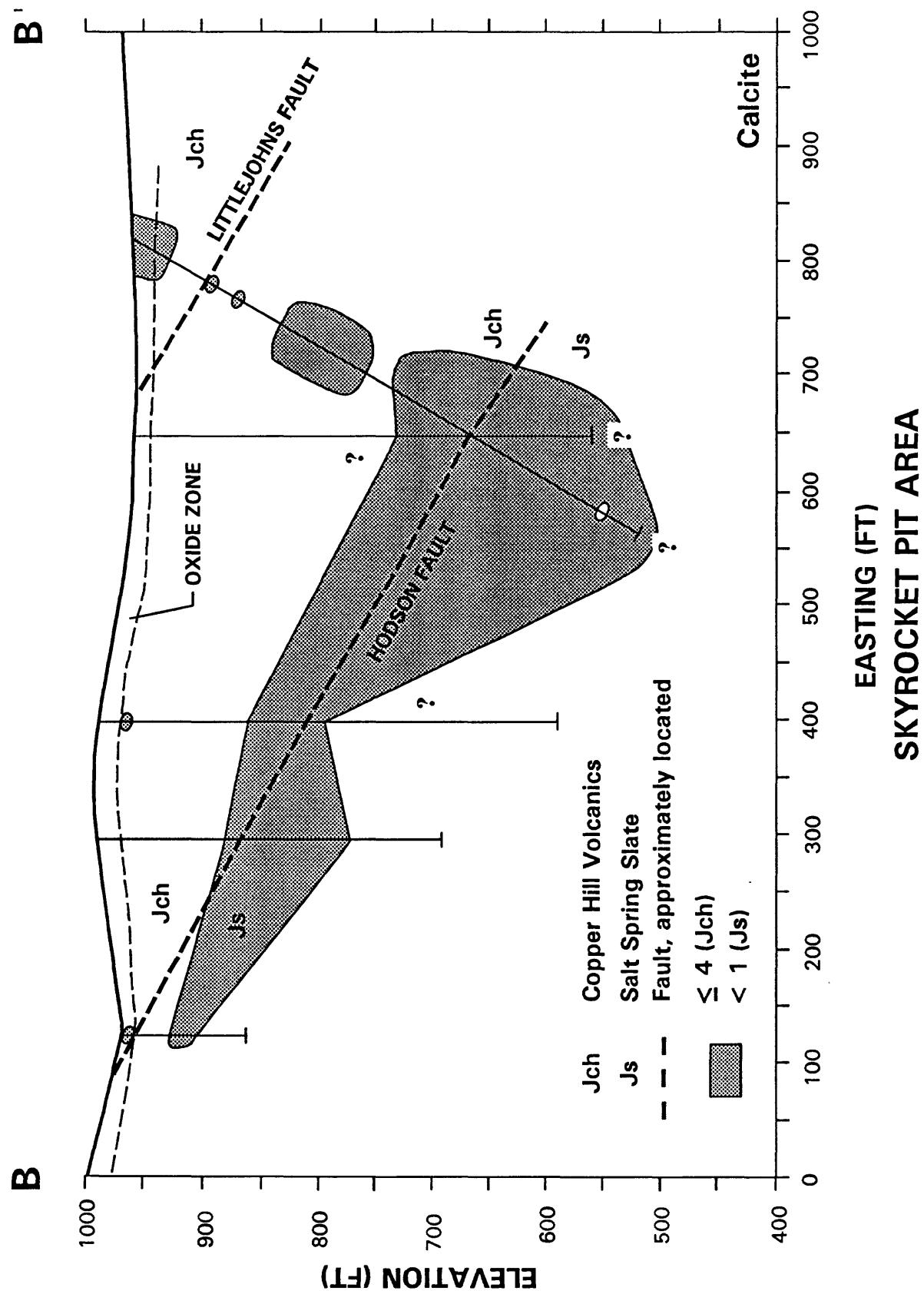


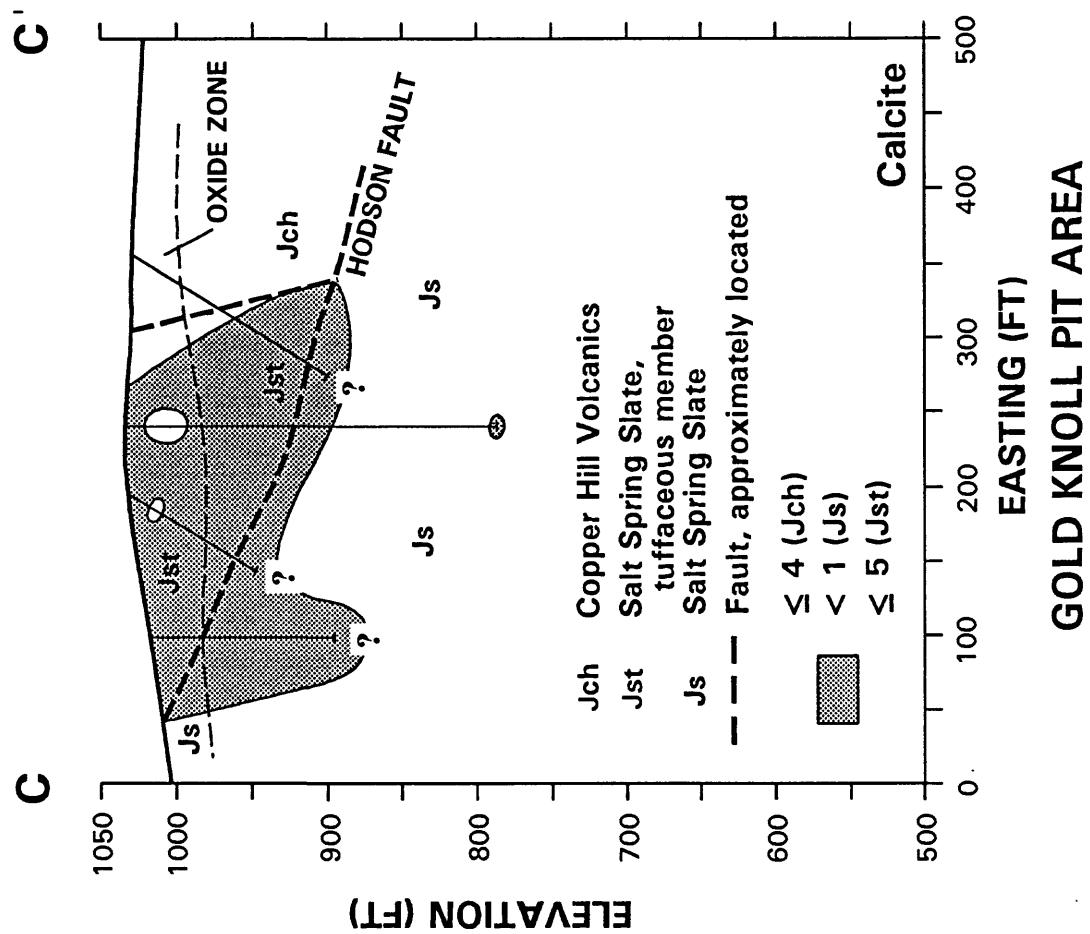
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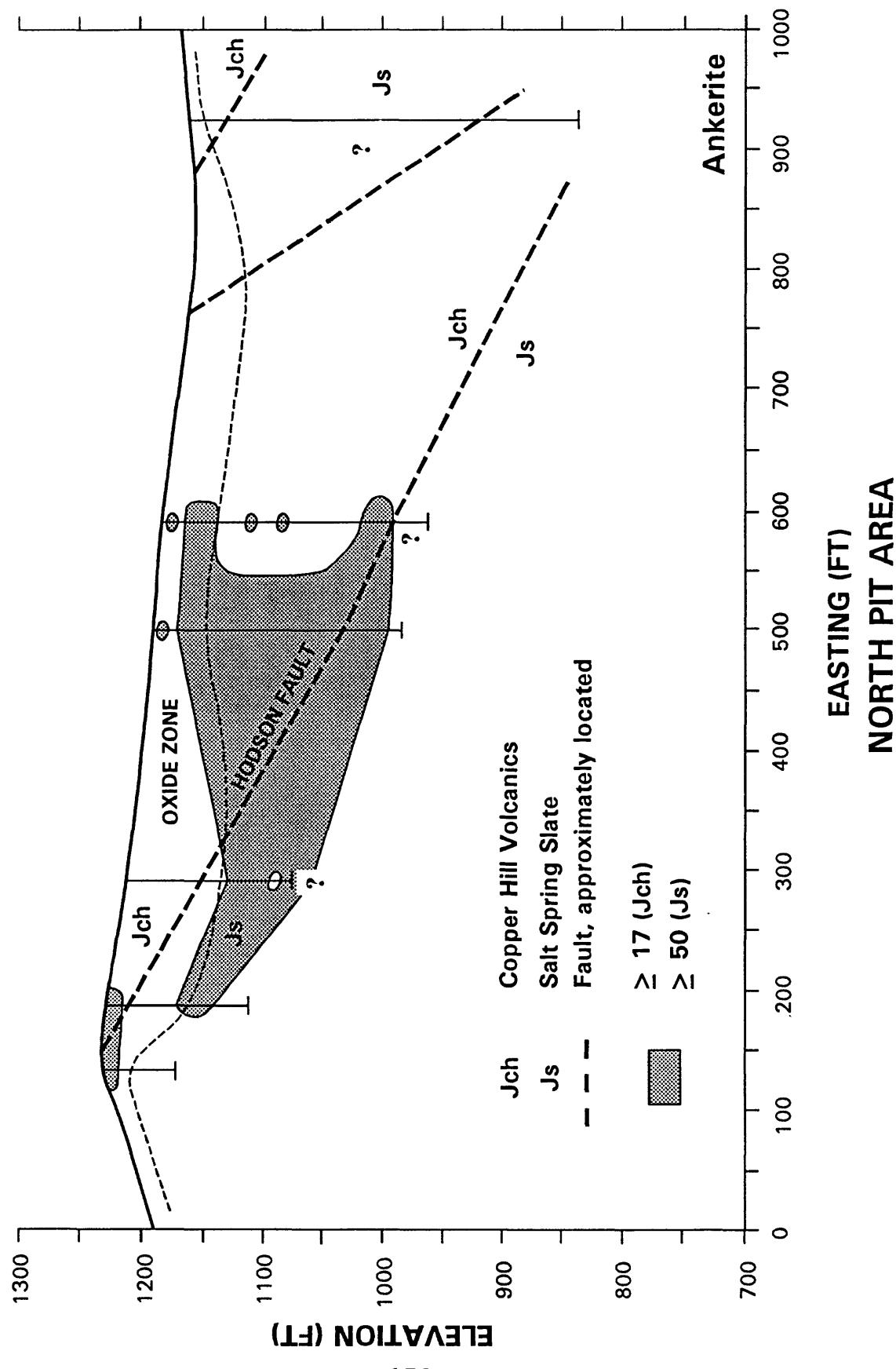


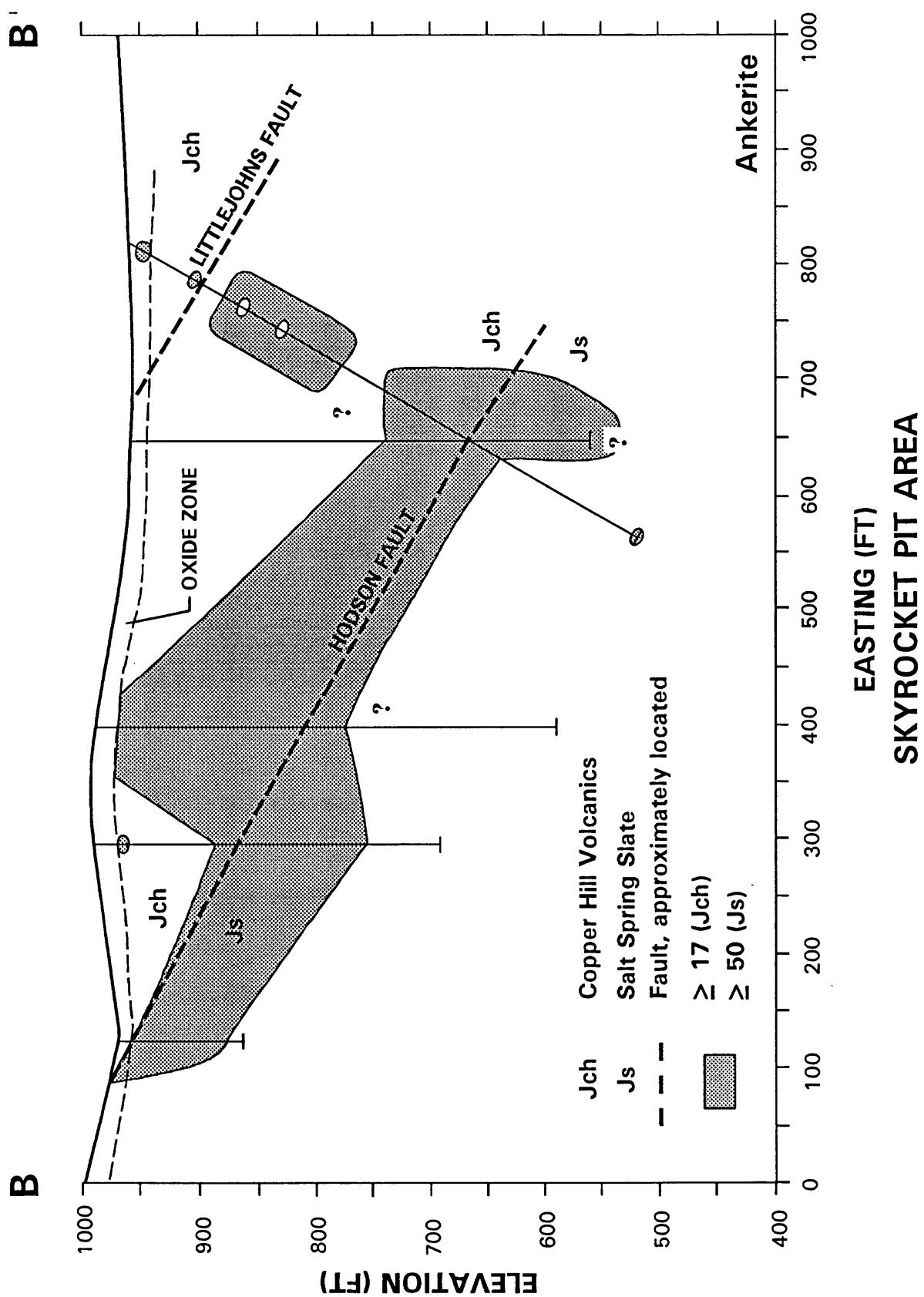


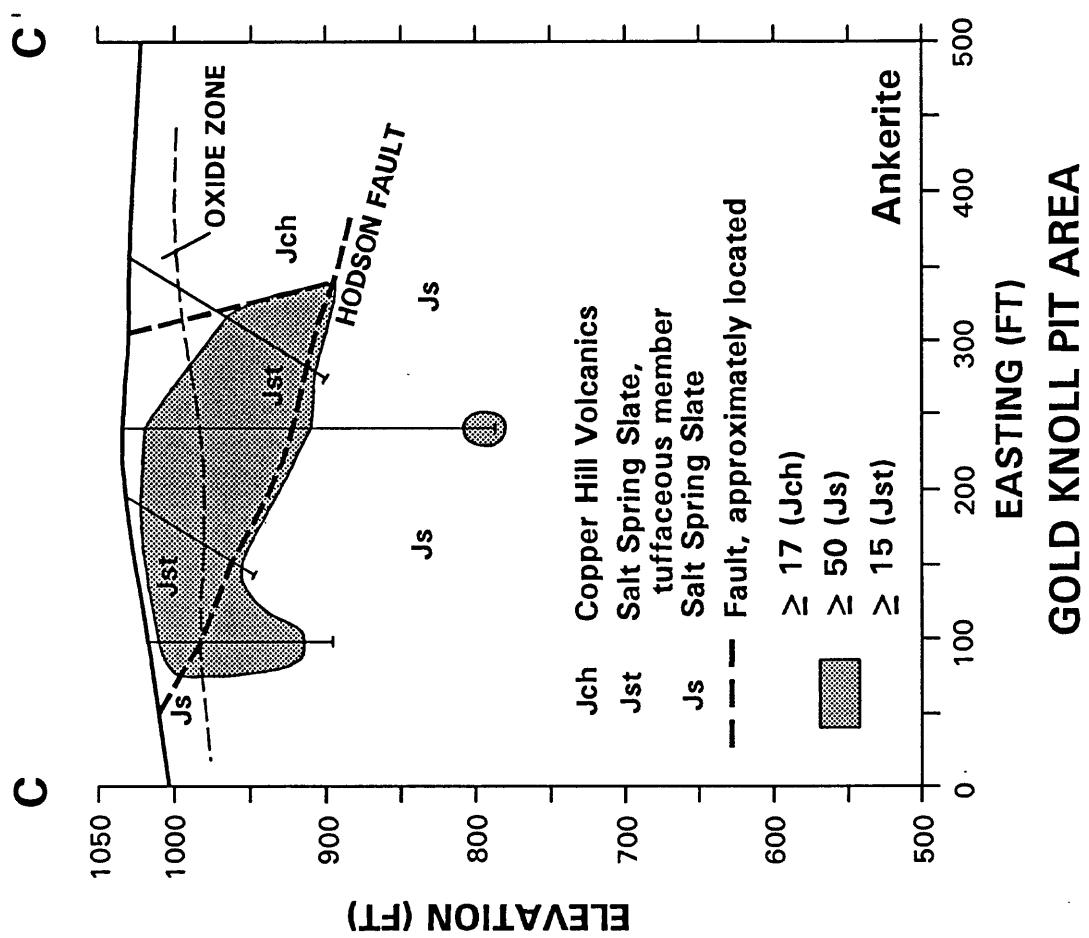
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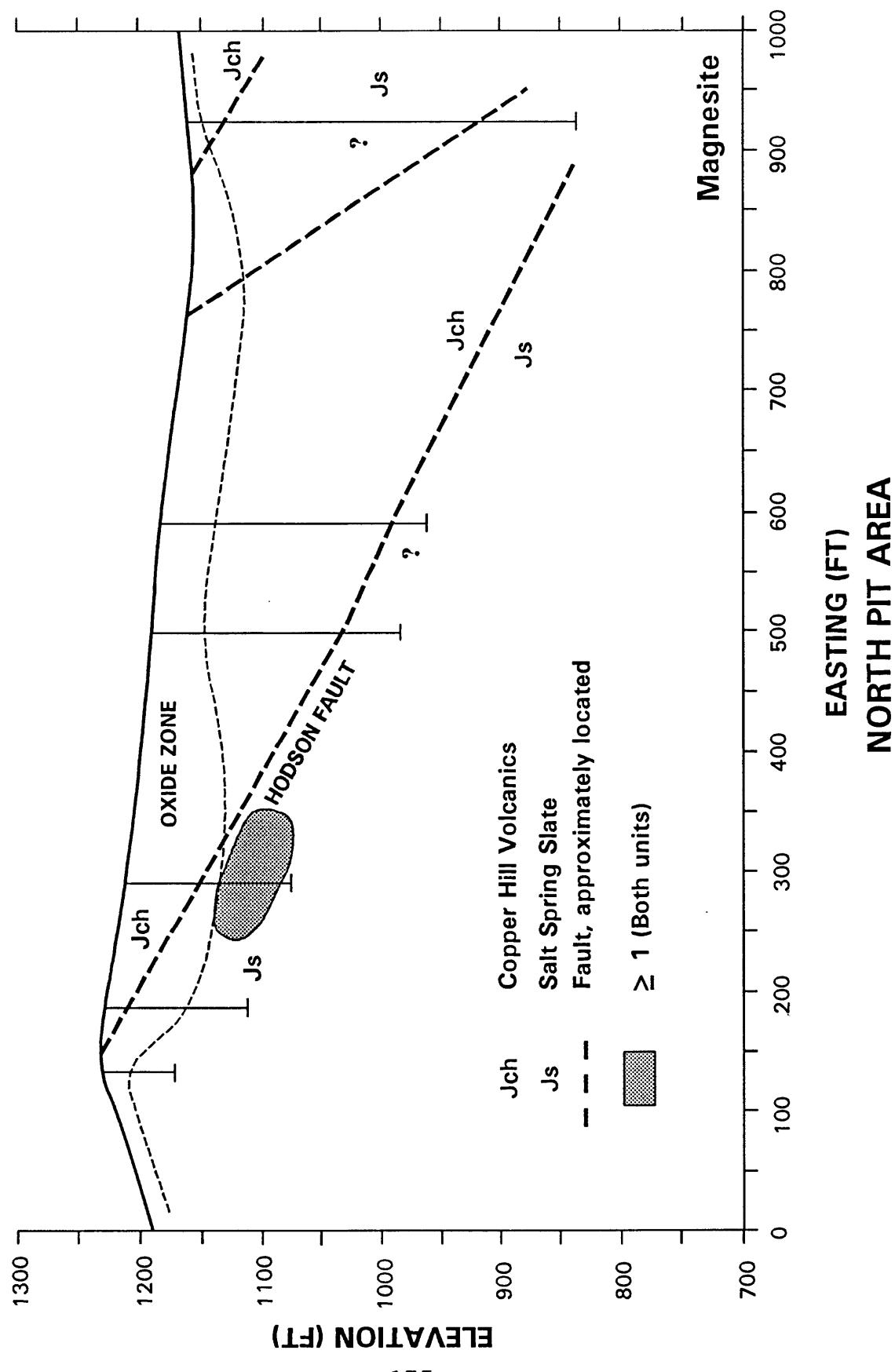


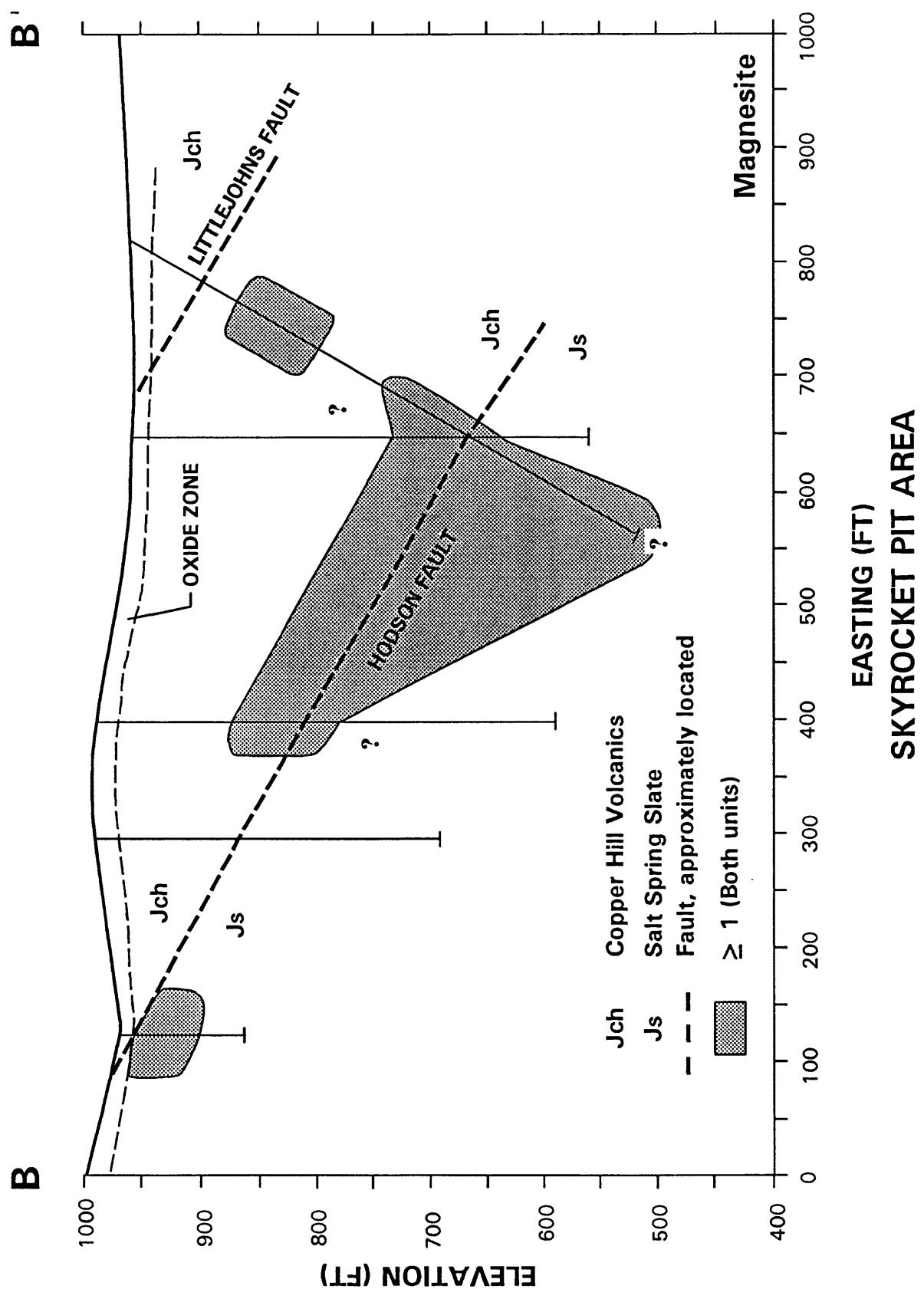


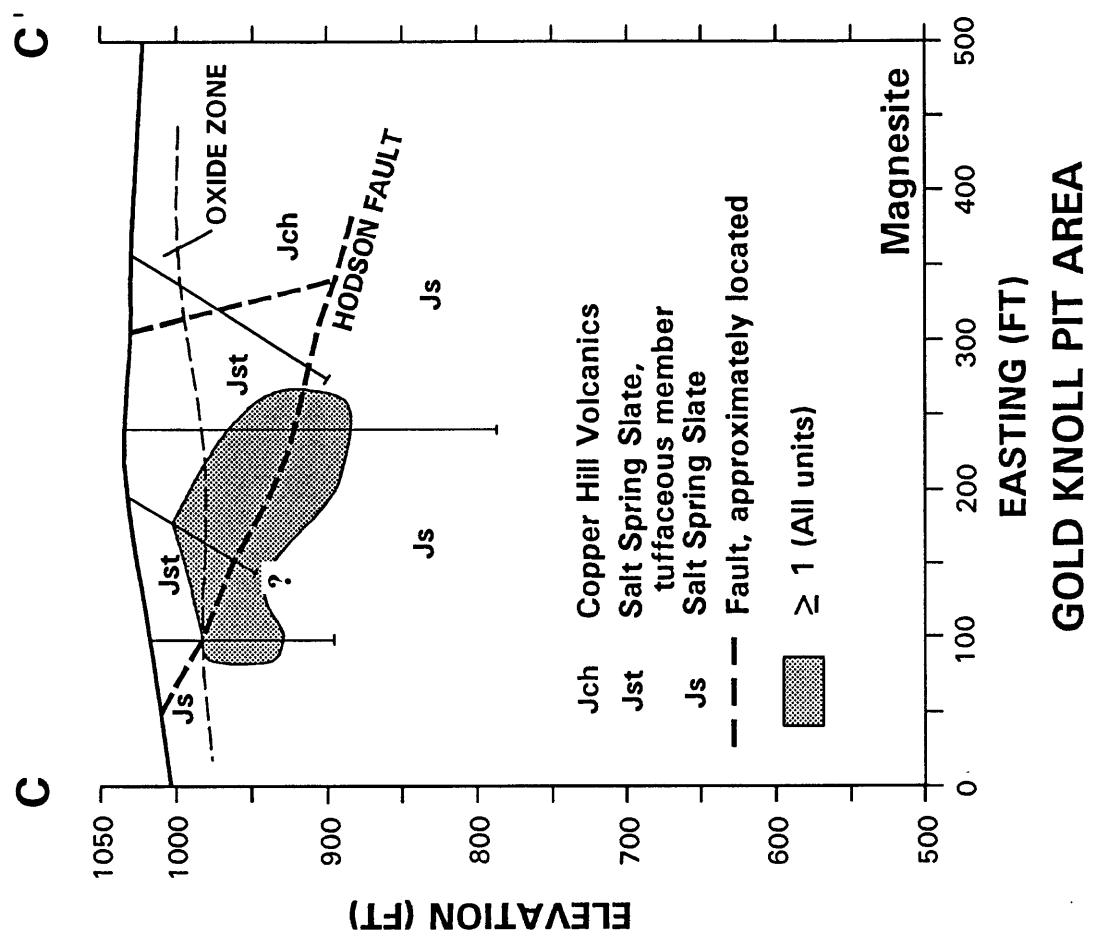
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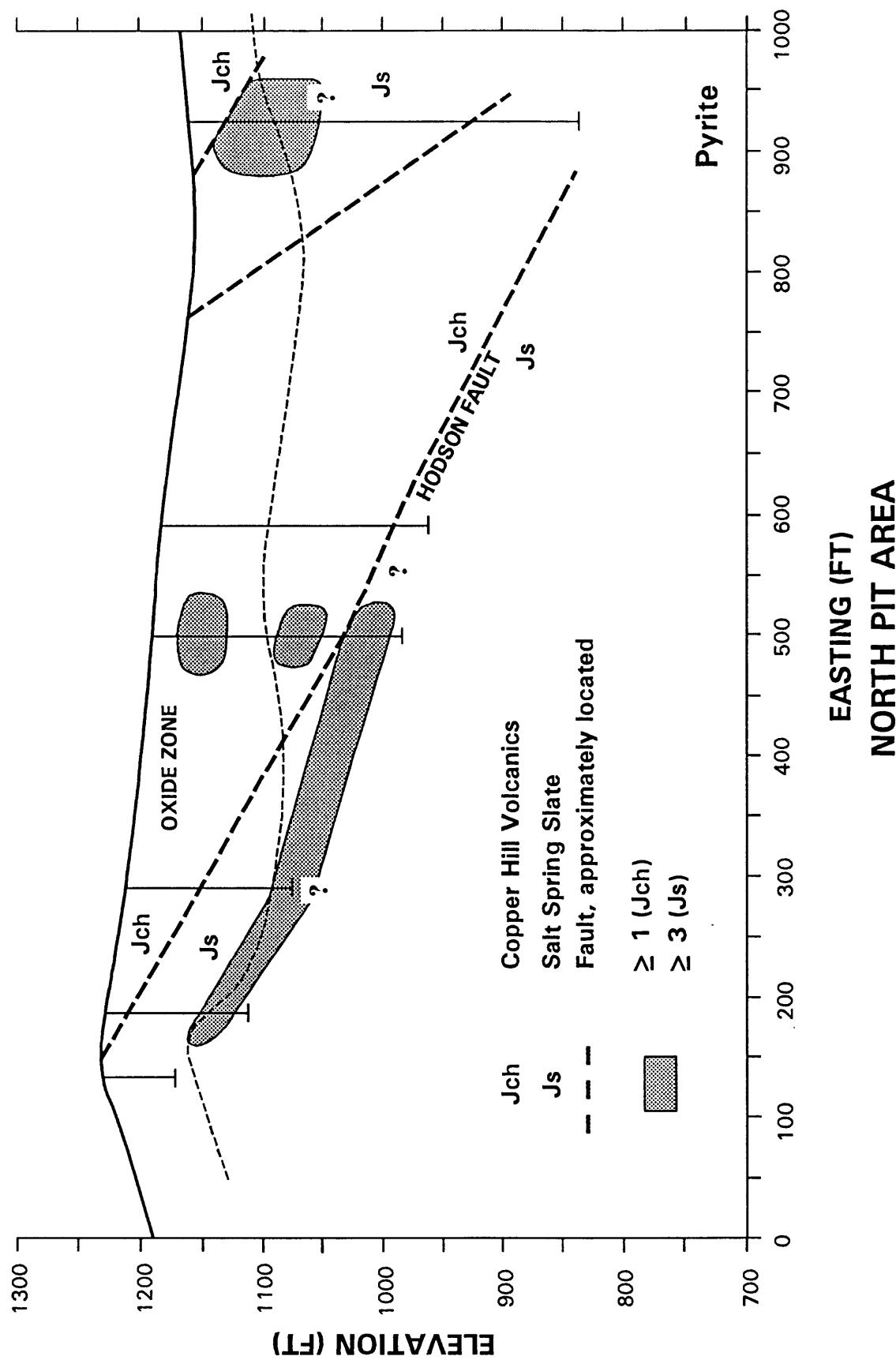
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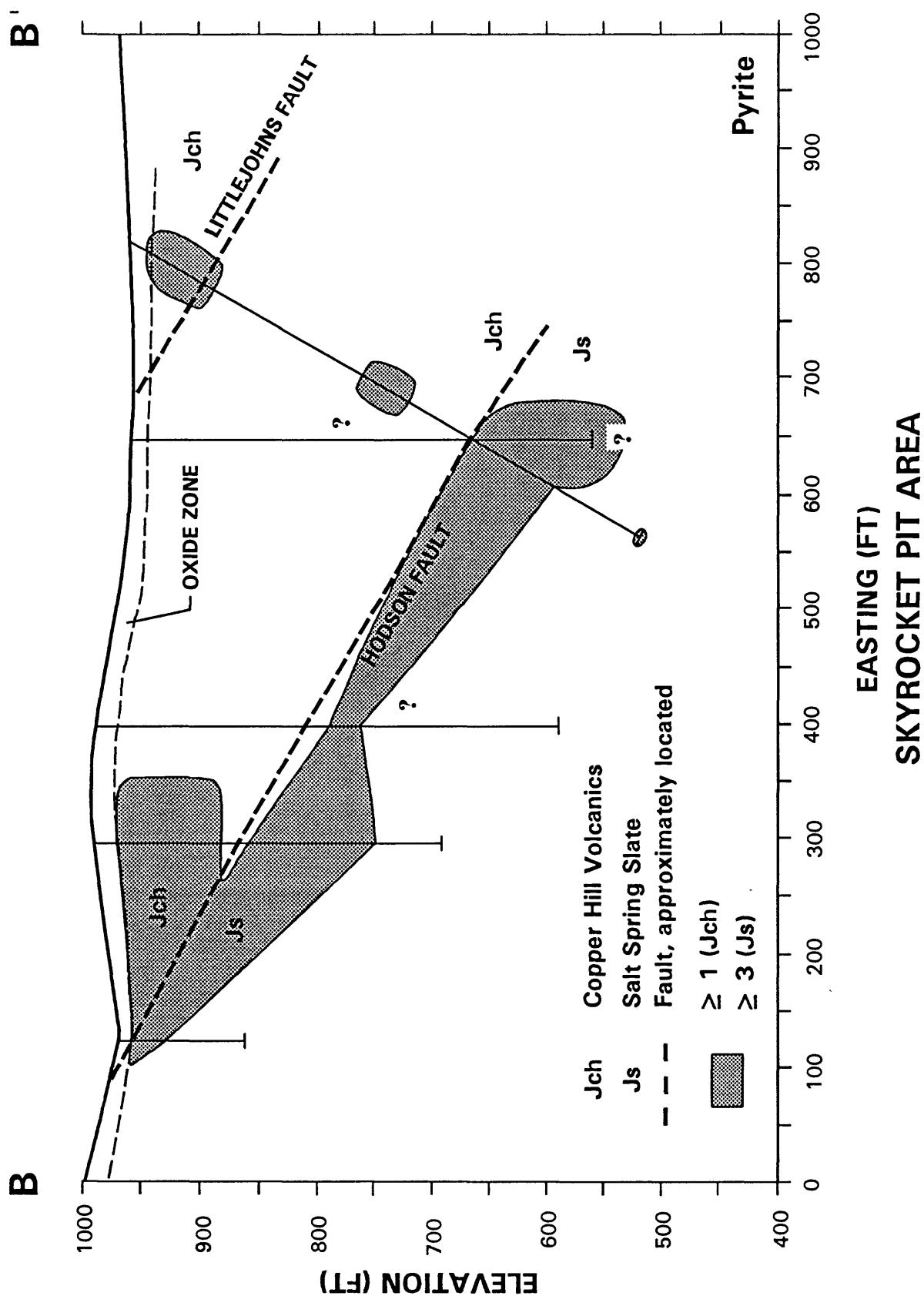


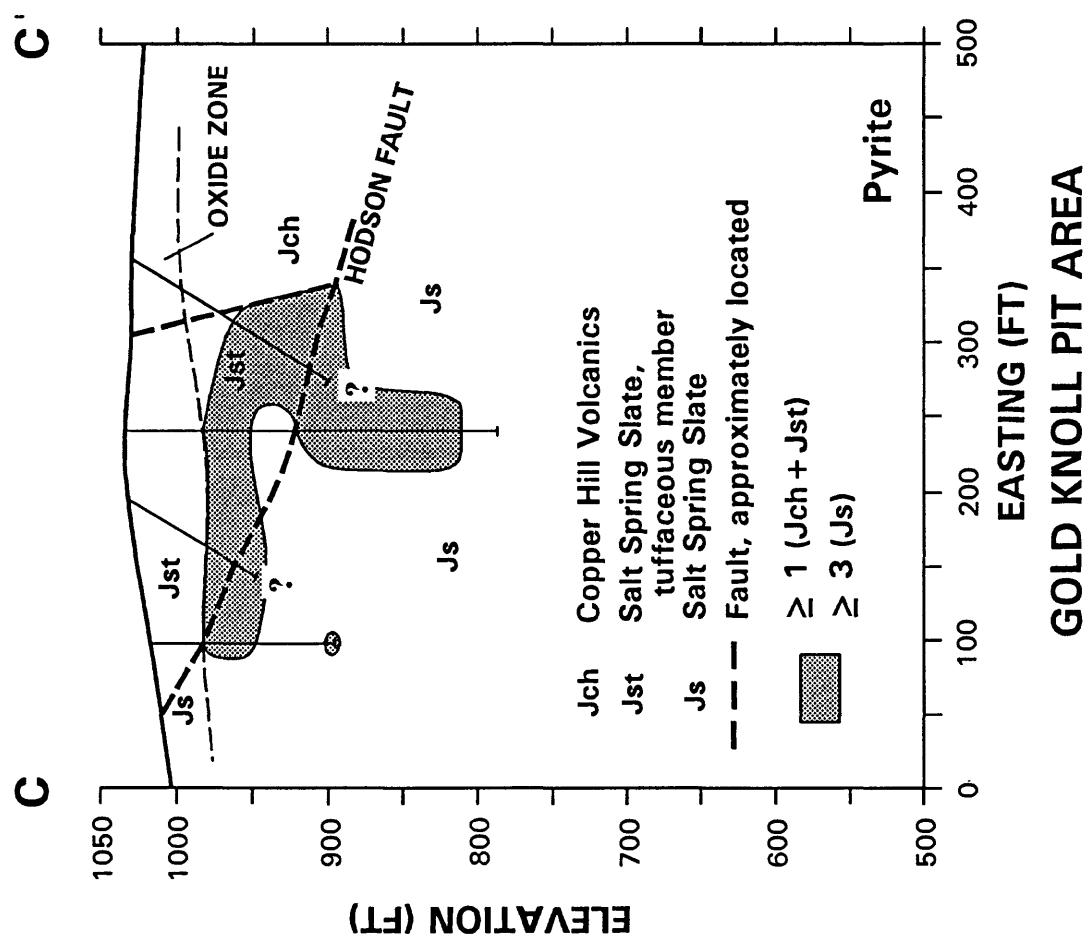


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DESCRIPTIONS OF APPENDICES 1 AND 2

Appendix 1 lists the chemical analyses for 44 elements determined in 300 samples of drill core or cuttings from the Hodson district. Following is a brief description of the column headings.

Sam. ID--For each sample ID, the letters (HD or MK) are for project identification. The first two numbers identify individual drill holes and the last three numbers give the average depth of the sample, in feet, below the collar.

Latitude and Longitude--The next two columns give, in degrees, minutes and seconds the approximate latitude and longitude for the appropriate cross section on which a given drill hole is located. The hole IDs are labelled on figures 3 to 5.

Ag ppm through Zr ppm--These columns of analyses list the element symbol, whether the concentrations are in percent or parts per million (ppm), and the analytical method. Within the data set, the values may be qualified with "N", "L", or "H". The meaning of these qualifiers is given on the first page of appendix 1. The letters "icp" below an element name indicate that it was determined by total extraction using inductively coupled plasma-atomic emission spectrometry (ICP-AES); "picp" indicates partial-extraction ICP; "aa" indicates atomic absorption analysis; "grav" indicates gravimetric analysis; "comb" indicates a combustion technique; and "xrf" indicates X-ray fluorescence analysis. Details of the analytical methods are given in the Analysis of Samples section of this report.

Appendix 2 lists the estimated values for peak heights for 10 minerals in 172 samples of drill core or cuttings, as determined by X-ray diffraction. A "0" for a given mineral indicates that it was looked for but not detected for a given sample. Leaders (---) for a given sample indicate that it was not analyzed for its mineralogy.

Appendix 1.--DATA FOR SAMPLES OF DRILL CORE OR CUTTINGS, HOOSON DISTRICT, CALIFORNIA

[N=not detected at lower limit of determination shown preceding letter. L=detected, but in a concentration less than value shown preceding letter. H=not reported because of interference. See text for data on analytical methods]

Sam. ID	Latitude	Longitude	Ag ppm picp	Al % icp	As ppm icp	Au ppm aa	Ba ppm icp	Be ppm icp	Bi ppm picp	Ca % icp	Cd ppm picp	Ce ppm icp
HD01007	38 00 14	120 41 53	0.073	9.02	20	0.062	205	1 N	0.60 N	1.22	0.051	48
HD01012	38 00 14	120 41 53	0.160	9.02	70	0.050	464	2	0.60 N	0.60	0.260	50
HD01017	38 00 14	120 41 53	0.130	9.04	70	0.016	374	2	0.60 N	0.63	0.140	51
HD01022	38 00 14	120 41 53	0.140	8.24	70	0.100	390	2	0.60 N	0.37	0.120	39
HD01032	38 00 14	120 41 53	0.220	9.54	100	0.050	533	3	0.60 N	0.44	0.150	47
HD01037	38 00 14	120 41 53	0.170	9.04	70	0.028	184	2	0.60 N	0.74	0.160	51
HD01042	38 00 14	120 41 53	0.190	5.27	80	0.050	178	2	0.60 N	0.28	0.390	29
HD01047	38 00 14	120 41 53	0.660	9.10	100	0.022	298	2	0.60 N	0.46	0.860	48
HD01052	38 00 14	120 41 53	0.620	8.94	100	0.042	256	2	0.60 N	0.47	0.660	44
HD01057	38 00 14	120 41 53	1.300	2.59	120	0.900	115	1 L	0.60 N	0.06	0.240	13
HD01062	38 00 14	120 41 53	0.370	1.51	40	0.250	80	1 L	0.60 N	0.76	0.100	7
HD01067	38 00 14	120 41 53	2.600	3.92	120	0.300	161	2	0.60 N	0.29	0.210	22
HD01072	38 00 14	120 41 53	2.900	1.45	40	0.350	66	1 L	0.60 N	0.05	0.068	5
HD01077	38 00 14	120 41 53	4.000	2.22	140	0.250	135	1 L	0.60 N	0.70	0.180	8
HD01082	38 00 14	120 41 53	1.700	4.31	250	0.024	344	1	0.60 N	2.27	0.320	22
HD01087	38 00 14	120 41 53	2.600	3.01	80	1.250	159	1 L	0.60 N	9.40	0.210	4 L
HD01092	38 00 14	120 41 53	1.800	4.92	40	0.150	352	1 L	0.60 N	3.45	0.300	11
HD01097	38 00 14	120 41 53	0.900	4.68	100	0.016	357	1	0.60 N	3.22	0.420	22
HD01102	38 00 14	120 41 53	1.400	5.11	140	0.006	165	1	0.60 N	5.51	0.052	6
HD01107	38 00 14	120 41 53	1.000	6.27	70	0.012	446	2	0.60 N	2.41	0.470	25
HD01112	38 00 14	120 41 53	1.500	6.76	130	0.002 L	527	2	0.60 N	2.33	0.470	21
HD01117	38 00 14	120 41 53	0.560	6.40	70	0.002 N	519	2	0.60 N	2.20	0.490	20
HD01122	38 00 14	120 41 53	0.340	6.46	50	0.002 N	548	1	0.60 N	1.69	0.580	23
HD01127	38 00 14	120 41 53	0.720	6.42	40	0.002 L	538	1	0.60 N	2.92	0.550	27
HD01132	38 00 14	120 41 53	1.200	3.56	70	0.002 N	248	1	0.60 N	2.71	0.190	17
HD01137	38 00 14	120 41 53	0.610	6.74	50	0.002	601	2	0.60 N	1.94	0.200	23
HD02002	38 00 14	120 41 53	0.049	7.72	10	0.004	107	1	0.60 N	4.62	0.110	39
HD02007	38 00 14	120 41 53	0.045 N	8.91	10 L	0.002	186	1	0.60 N	5.70	0.060	44
HD02012	38 00 14	120 41 53	0.045	9.34	10 L	0.002	254	1	0.60 N	2.67	0.110	53
HD02017	38 00 14	120 41 53	0.045 N	9.61	10 L	0.002	171	1	0.60 N	5.80	0.100	49
HD02022	38 00 14	120 41 53	0.045 N	9.82	10 L	0.002	266	1	0.60 N	7.60	0.093	51
HD02032	38 00 14	120 41 53	0.045 N	8.77	10 L	0.002	155	1	0.60 N	10.10	0.160	44
HD02042	38 00 14	120 41 53	0.045 N	8.53	10 L	0.002 L	174	1	0.60 N	11.20	0.130	49
HD02052	38 00 14	120 41 53	0.045 N	8.71	10 L	0.004	192	1	0.60 N	8.95	0.086	45
HD02062	38 00 14	120 41 53	0.045 N	7.61	10 L	0.002 N	91	1	0.60 N	12.20	0.150	42
HD02072	38 00 14	120 41 53	0.045 N	8.05	10 L	0.002 L	139	1	0.60 N	12.50	0.150	44
HD02082	38 00 14	120 41 53	0.045 N	9.35	10 L	0.002 L	322	1	0.60 N	6.13	0.067	54
HD02092	38 00 14	120 41 53	0.045 N	8.14	10 L	0.002	234	2	0.60 N	9.32	0.091	55
HD02102	38 00 14	120 41 53	0.450	8.01	60	0.750	265	1	0.60 N	6.76	0.100	42
HD02112	38 00 14	120 41 53	0.076	8.56	10 L	0.002 L	144	1	0.60 N	8.56	0.150	49
HD02122	38 00 14	120 41 53	0.045 N	8.62	10 L	0.002 N	148	1	0.60 N	8.57	0.099	46
HD02132	38 00 14	120 41 53	0.045 N	8.86	10 L	0.002 L	176	1	0.60 N	7.90	0.130	47
HD02142	38 00 14	120 41 53	0.045 N	8.85	10 L	0.002 L	347	1	0.60 N	5.47	0.064	51
HD02152	38 00 14	120 41 53	7.100	2.02	140	1.150	157	1 L	0.60 N	2.61	0.370	5
HD02157	38 00 14	120 41 53	1.600	4.61	170	0.100	355	1	0.60 N	3.29	0.420	15

Appendix 1.--continued

Sam.	ID	Co ppm icp	Cr ppm icp	Cu ppm icp	Eu ppm icp	Fe % icp	Ga ppm icp	Hg ppm aa	K % icp	La ppm icp	Li ppm icp	LOI % grav	Mg % icp	Mn ppm icp	Mo ppm picp
HD01007		67	57	45	2	7.47	19	0.02 N	0.77	22	76	9.11	1.90	545	0.37
HD01012		51	50	50	2	7.70	23	0.02 N	2.64	25	42	7.04	1.03	3030	2.00
HD01017		31	58	52	2 L	7.60	21	0.02 N	2.54	26	45	7.28	1.26	1140	1.20
HD01022		26	54	55	2 L	6.62	19	0.02	2.65	19	37	6.60	1.14	779	0.93
HD01032		34	59	58	2 L	8.12	22	0.04	3.21	23	34	6.49	0.92	1950	1.80
HD01037		36	64	44	2 L	7.51	21	0.02	1.43	24	47	7.55	1.33	690	1.00
HD01042		29	44	30	2 L	6.50	12	0.04	1.71	14	13	3.58	0.36	477	0.94
HD01047		59	70	52	2	7.27	20	0.04	2.45	23	28	7.23	1.12	1050	0.73
HD01052		60	89	44	2	7.56	20	0.04	2.21	22	29	7.47	1.15	810	0.84
HD01057		16	21	21	2 L	3.43	6	0.06	0.85	6	3	1.69	0.12	205	0.53
HD01062		6	7	7	2 L	1.05	4	0.04	0.54	3	2	2.02	0.30	241	0.25
HD01067		11	61	41	2 L	4.21	9	0.14	1.39	10	3	2.81	0.27	186	0.64
HD01072		3	57	11	2 L	1.07	4 L	0.24	0.40	2 L	2 L	0.79	0.06	28	0.31
HD01077		11	48	32	2 L	2.18	6	0.18	0.74	4	7	2.64	0.43	136	0.49
HD01082		15	64	43	2 L	4.87	10	0.34	1.45	12	11	7.19	1.52	656	0.86
HD01087		14	62	44	2 L	4.71	9	0.44	1.13	3	3	19.40	3.88	1110	0.16
HD01092		11	71	33	2 L	4.40	11	0.20	1.26	6	11	10.30	1.90	794	0.57
HD01097		13	63	44	2 L	4.70	10	0.16	1.42	12	13	10.30	2.04	764	0.73
HD01102		32	260	12	2 L	5.24	11	0.06	1.41	4	20	21.20	6.93	1220	0.13
HD01107		16	111	56	2 L	5.21	13	0.14	1.86	13	5	11.00	2.19	669	0.98
HD01112		24	93	60	2 L	5.10	15	0.18	2.11	11	4	9.45	1.81	554	1.10
HD01117		15	91	56	2 L	5.00	14	0.14	1.98	10	4	10.20	1.84	736	1.00
HD01122		14	80	52	2 L	4.79	14	0.14	1.82	11	3	9.09	1.75	450	1.20
HD01127		12	69	55	2 L	4.62	14	0.14	1.72	14	6	10.20	1.81	523	1.10
HD01132		8	46	19	2 L	2.54	9	0.20	0.86	9	24	6.12	1.10	444	0.89
HD01137		19	91	54	2 L	4.63	15	0.16	1.62	11	40	6.13	1.55	1120	1.20
HD02002		15	27	32	2	4.64	17	0.02	0.37	22	21	5.27	0.89	458	0.12
HD02007		25	54	56	2	6.75	19	0.04	1.44	25	40	5.66	1.74	739	0.13
HD02012		26	61	48	2	7.21	21	0.02 N	2.28	28	51	5.61	1.72	939	0.19
HD02017		28	51	49	2	6.52	22	0.02	1.30	26	43	4.41	1.71	881	0.13
HD02022		27	45	38	2	5.93	22	0.16	2.01	28	28	5.60	1.43	954	0.11
HD02032		21	50	47	2	5.20	21	0.02	1.05	24	24	8.47	1.35	1270	0.15
HD02042		24	34	50	2	5.28	20	0.02 N	1.22	28	22	9.75	1.35	1270	0.17
HD02052		24	36	52	2	5.64	20	0.02	1.20	25	25	7.54	1.40	1190	0.15
HD02062		21	27	43	2	4.70	17	0.06	0.54	24	20	11.30	1.23	1480	0.41
HD02072		22	24	49	2	4.89	19	0.04	0.88	26	20	11.30	1.27	1480	0.17
HD02082		32	27	61	3	6.86	21	0.02	2.13	28	34	4.49	1.89	744	0.12
HD02092		24	11	40	3	6.19	20	0.02 N	1.35	31	31	7.83	1.67	966	0.09
HD02102		28	33	55	2 L	6.19	19	0.08	2.27	23	36	9.79	1.89	824	0.26
HD02112		24	49	50	2	5.80	20	0.02	0.77	26	29	6.99	1.80	988	0.18
HD02122		33	161	66	2	5.93	20	0.02 N	0.77	26	29	6.25	2.52	1130	0.19
HD02132		30	54	57	2	5.95	21	0.04	0.90	26	24	5.60	1.88	999	0.18
HD02142		27	54	60	2	6.63	20	0.08	2.68	27	36	7.98	2.11	637	0.15
HD02152		7	33	32	2 L	2.43	4	0.74	0.52	4	11	4.94	1.01	436	0.74
HD02157		13	66	49	2 L	4.79	10	0.32	1.48	8	7	8.53	1.76	736	0.79

Appendix 1.--continued

Sam. ID	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	S %	Sb ppm	Sc ppm	SiO ₂ %	Sr ppm	Te ppm	Th ppm
	icp	icp	icp	icp	icp	icp	comb	picp	icp	xrf	icp	aa	icp
HD01007	2.83	18	30	35	0.240	11	0.05 L	1.40	24	50.90	203	0.005 L	4 L
HD01012	1.05	9	29	39	0.220	4 L	0.05 L	1.50	24	53.50	107	0.005	4 L
HD01017	1.13	16	29	34	0.230	4 L	0.05 L	1.80	26	53.40	96	0.005	4 L
HD01022	0.61	9	22	25	0.110	109	0.05 L	1.20	23	59.00	48	0.005 L	4 L
HD01032	1.02	13	25	40	0.170	7	0.05 L	2.60	25	51.60	62	0.010	4 L
HD01037	2.69	11	27	47	0.210	4 L	0.05 L	3.10	24	52.90	121	0.005 L	4 L
HD01042	0.73	8	15	62	0.140	4 L	0.05 L	5.40	17	70.70	49	0.005	4 L
HD01047	1.28	9	32	113	0.130	4 L	0.05 L	3.10	26	53.70	104	0.005 L	4 L
HD01052	1.28	13	28	106	0.130	4 L	0.05 L	2.80	26	54.80	121	0.005 L	4 L
HD01057	0.40	4 L	9	22	0.040	6	0.05 L	1.40	8	85.00	23	0.025	4 L
HD01062	0.20	4 L	4	7	0.020	10	0.15	0.60 N	3	89.70	46	0.005	4 L
HD01067	0.41	4 L	15	55	0.070	50	0.05	2.10	11	79.10	38	0.010	4 L
HD01072	0.39	4 L	4	18	0.020	6	0.07	0.87	4	92.30	12	0.010	4 L
HD01077	0.25	4 L	6	37	0.030	12	0.73	7.20	6	85.00	65	0.020	4 L
HD01082	0.71	4 L	12	48	0.070	28	1.13	4.30	10	66.20	232	0.060	4 L
HD01087	0.32	4 L	6	34	0.020	26	0.67	2.20	17	45.10	907	0.010	4 L
HD01092	1.45	4 L	9	37	0.070	13	0.22	1.90	12	61.10	339	0.020	4 L
HD01097	1.05	4 L	12	43	0.080	26	0.49	1.80	12	61.40	356	0.035	4
HD01102	1.00	4 L	7	180	0.040	6	0.05 L	3.20	19	38.80	881	0.005 L	4 L
HD01107	1.52	4 L	17	63	0.100	14	0.20	2.10	15	56.50	256	0.045	6
HD01112	1.46	4 L	14	70	0.190	25	0.77	2.80	16	57.00	252	0.065	4
HD01117	1.41	4 L	14	51	0.140	11	0.21	1.70	16	58.60	243	0.045	5
HD01122	1.68	4 L	13	45	0.110	23	0.25	1.80	15	60.10	236	0.200	6
HD01127	1.82	4 L	15	41	0.100	16	0.28	1.30	14	56.90	426	0.045	4
HD01132	0.43	4 L	10	28	0.040	13	0.80	1.60	8	73.30	308	0.035	4 L
HD01137	1.09	4 L	13	56	0.090	18	0.61	1.70	15	62.70	214	0.060	5
HD02002	2.64	19	27	16	0.120	4 L	0.05 L	0.85	16	59.70	273	0.005 L	4 L
HD02007	2.04	18	31	28	0.160	4 L	0.05 L	0.60 N	27	49.70	761	0.005	4 L
HD02012	1.56	15	32	26	0.160	4 L	0.05 L	0.60 N	28	52.20	449	0.005 L	4 L
HD02017	2.02	21	32	26	0.160	4 L	0.05 L	0.60 N	28	50.20	622	0.005 L	4 L
HD02022	1.75	20	32	23	0.170	4 L	0.05 L	0.60 N	28	46.70	604	0.005 L	4 L
HD02032	2.30	19	31	13	0.190	4 L	0.05 L	0.60 N	24	44.40	328	0.005 L	4 L
HD02042	2.17	5	33	12	0.180	4 L	0.05 L	0.60 N	24	41.40	424	0.005 L	4 L
HD02052	2.38	19	32	17	0.190	4 L	0.05 L	0.60 N	23	45.50	467	0.005 L	4 L
HD02062	2.59	5	30	13	0.190	4 L	0.05 L	0.60 N	20	41.30	302	0.005 L	4 L
HD02072	2.29	4 L	34	13	0.200	4	0.05 L	0.60 N	22	40.10	368	0.005 L	4 L
HD02082	1.37	22	34	26	0.130	4 L	0.05 L	0.60 N	26	49.30	574	0.005 L	4 L
HD02092	1.38	5	39	16	0.170	4 L	0.05 L	0.60 N	22	46.10	364	0.005 L	4 L
HD02102	1.11	9	29	22	0.130	4 L	0.36	0.60 N	21	46.30	509	0.010	4 L
HD02112	2.51	17	32	27	0.160	4 L	0.05 L	0.60 N	24	46.90	462	0.005	4 L
HD02122	2.14	17	33	67	0.160	4 L	0.05 L	0.60 N	27	46.70	687	0.005	4 L
HD02132	2.44	20	33	33	0.170	4 L	0.05 L	0.60 N	23	47.50	482	0.005	4 L
HD02142	1.25	18	30	24	0.140	4 L	0.05 L	0.60 N	23	47.20	390	0.005 L	4 L
HD02152	0.67	4 L	4	20	0.030	74	0.95	3.10	7	78.40	219	0.055	4 L
HD02157	1.03	4 L	11	52	0.080	18	1.30	1.60	12	61.50	298	0.040	4 L

Appendix 1.--continued

Sam. ID	Ti % icp	Tl ppm aa	V ppm icp	W ppm aa	Y ppm icp	Yb ppm icp	Zn ppm icp	Geologic unit
HD01007	1.040	0.10	304	4.0	25	3	89	Copper Hill Volcanics
HD01012	0.450	0.30	352	23.0	17	2	88	Copper Hill Volcanics
HD01017	0.760	0.25	354	18.0	16	2	98	Copper Hill Volcanics
HD01022	0.440	0.25	307	27.0	11	1	127	Copper Hill Volcanics
HD01032	0.470	0.40	398	36.0	14	1	100	Copper Hill Volcanics
HD01037	0.530	0.10	333	19.0	18	2	106	Copper Hill Volcanics
HD01042	0.390	0.25	229	12.0	13	1	89	Copper Hill Volcanics
HD01047	0.520	0.20	338	18.0	28	2	288	Copper Hill Volcanics
HD01052	0.760	0.20	352	17.0	29	3	319	Copper Hill Volcanics
HD01057	0.090	0.15	98	14.0	5	1 L	70	Copper Hill Volcanics
HD01062	0.050	0.10	42	9.0	3	1 L	41	Copper Hill Volcanics
HD01067	0.090	0.30	114	14.0	23	1	92	Copper Hill Volcanics
HD01072	0.050	0.10	37	4.0	6	1 L	26	Copper Hill Volcanics
HD01077	0.040	0.15	56	5.5	6	1 L	53	Salt Spring Slate
HD01082	0.130	0.30	87	6.0	11	1 L	114	Salt Spring Slate
HD01087	0.040	0.20	98	6.0	9	1 L	64	Salt Spring Slate
HD01092	0.070	0.15	79	4.0	9	1 L	97	Salt Spring Slate
HD01097	0.120	0.25	87	4.0	11	1	144	Salt Spring Slate
HD01102	0.100	0.30	126	7.0	8	1 L	30	Salt Spring Slate
HD01107	0.190	0.30	125	5.0	12	2	135	Salt Spring Slate
HD01112	0.100	0.35	136	7.0	13	1	126	Salt Spring Slate
HD01117	0.090	0.30	127	5.0	12	1	138	Salt Spring Slate
HD01122	0.130	0.35	130	4.0	11	1	155	Salt Spring Slate
HD01127	0.160	0.30	115	5.0	15	2	171	Salt Spring Slate
HD01132	0.110	0.20	75	7.5	9	1 L	57	Salt Spring Slate
HD01137	0.220	0.20	143	4.5	15	1	111	Salt Spring Slate
HD02002	0.750	0.05	251	3.0	24	3	49	Copper Hill Volcanics
HD02007	1.030	0.05	281	1.0	22	2	95	Copper Hill Volcanics
HD02012	0.890	0.05 L	280	2.0	22	2	77	Copper Hill Volcanics
HD02017	1.070	0.10	293	4.0	23	2	90	Copper Hill Volcanics
HD02022	1.060	0.05	288	1.0	25	2	65	Copper Hill Volcanics
HD02032	0.990	0.05 L	285	2.0	21	2	59	Copper Hill Volcanics
HD02042	0.990	0.05 L	287	1.0	22	2	66	Copper Hill Volcanics
HD02052	1.010	0.05	250	4.0	22	2	122	Copper Hill Volcanics
HD02062	0.910	0.05 L	242	1.0	19	2	73	Copper Hill Volcanics
HD02072	0.880	0.05 L	273	1.0	21	2	76	Copper Hill Volcanics
HD02082	1.120	0.05	261	1.0	23	3	91	Copper Hill Volcanics
HD02092	1.020	0.05 L	227	1.0	24	3	90	Copper Hill Volcanics
HD02102	0.650	0.20	246	7.5	15	1	79	Copper Hill Volcanics
HD02112	1.010	0.05 N	295	1.0	22	2	67	Copper Hill Volcanics
HD02122	1.010	0.05 L	297	0.5	23	3	70	Copper Hill Volcanics
HD02132	1.030	0.05 L	305	1.0	22	2	73	Copper Hill Volcanics
HD02142	0.890	0.15	244	1.0	17	2	82	Copper Hill Volcanics
HD02152	0.040	0.10	39	6.0	4	1 L	156	Salt Spring Slate
HD02157	0.070	0.25	81	4.5	9	1 L	160	Salt Spring Slate

Appendix 1.--continued

Sam.	ID	Latitude	Longitude	Ag ppm picp	Al % icp	As ppm icp	Au ppm aa	Ba ppm icp	Be ppm icp	Bi ppm picp	Ca % icp	Cd ppm picp	Ce ppm icp
HD02162		38 00 14	120 41 53	3.600	5.79	200	0.100	441	2	0.60 N	3.02	0.420	21
HD02172		38 00 14	120 41 53	0.570	5.49	70	0.002	497	1	0.60 N	2.60	0.350	18
HD02182		38 00 14	120 41 53	0.410	6.66	40	0.002	598	1	0.60 N	2.18	0.380	20
HD02192		38 00 14	120 41 53	0.370	6.94	50	0.002	683	1	0.60 N	2.24	0.300	23
HD02202		38 00 14	120 41 53	0.520	7.86	50	0.002	759	2	0.60 N	1.80	0.450	20
HD03002		38 00 14	120 41 53	0.160	6.40	40	0.006	408	1	0.60 N	0.83	0.076	36
HD03007		38 00 14	120 41 53	0.350	7.23	80	0.002	660	2	0.60 N	0.44	0.300	19
HD03012		38 00 14	120 41 53	0.200	6.97	60	0.002	639	2	0.60 N	0.48	0.410	22
HD03022		38 00 14	120 41 53	0.230	5.93	50	0.002	515	1	0.60 N	0.42	0.160	20
HD03032		38 00 14	120 41 53	0.140	6.10	40	0.002 N	321	1 L	0.60 N	4.80	0.280	14
HD03042		38 00 14	120 41 53	0.160	5.31	40	0.002 N	336	1 L	0.60 N	4.63	0.220	16
HD03052		38 00 14	120 41 53	0.180	6.90	30	0.004	430	1	0.60 N	3.19	0.380	16
HD03062		38 00 14	120 41 53	0.170	5.68	30	0.002 N	372	1 L	0.60 N	6.05	0.270	11
HD03072		38 00 14	120 41 53	0.280	7.72	40	0.002 N	704	1	0.60 N	3.18	0.320	25
HD03082		38 00 14	120 41 53	0.260	7.84	30	0.002	609	2	0.60 N	1.65	0.420	16
HD03092		38 00 14	120 41 53	0.290	7.75	50	0.002 N	718	2	0.60 N	2.68	0.420	21
HD03102		38 00 14	120 41 53	0.350	8.11	70	0.002 N	790	2	0.60 N	1.64	0.410	29
HD04002		37 59 12	120 40 37	0.420	7.61	80	0.002	753	2	0.60 N	0.44	0.460	35
HD04007		37 59 12	120 40 37	4.900	5.28	180	1.000	530	2	0.60 N	0.78	0.260	21
HD04012		37 59 12	120 40 37	2.000	3.88	210	0.500	387	1	0.60 N	1.28	0.270	14
HD04022		37 59 12	120 40 37	0.300	4.86	80	0.004	287	1 L	0.60 N	2.78	0.120	11
HD04032		37 59 12	120 40 37	0.150	7.53	20	0.002	219	1 L	0.60 N	3.53	0.050	17
HD04042		37 59 12	120 40 37	0.096	7.99	10 L	0.002	180	1 L	0.60 N	3.78	0.048	21
HD04052		37 59 12	120 40 37	0.350	4.80	110	0.010	326	1	0.60 N	3.92	0.180	12
HD04062		37 59 12	120 40 37	0.940	5.16	100	0.002 N	474	1	0.60 N	2.82	0.320	18
HD04072		37 59 12	120 40 37	0.100	5.08	30	0.002 N	310	1 L	0.60 N	3.28	0.210	7
HD04082		37 59 12	120 40 37	0.500	4.88	180	0.026	357	1	0.60 N	3.46	0.230	16
HD04092		37 59 12	120 40 37	0.200	5.89	20	0.002 N	557	1	0.60 N	2.26	0.420	12
HD04102		37 59 12	120 40 37	0.210	7.13	20	0.002 N	621	1	0.60 N	1.76	0.250	13
HD04112		37 59 12	120 40 37	0.190	7.01	20	0.002 N	627	1	0.60 N	1.65	0.390	21
HD04117		37 59 12	120 40 37	0.180	7.38	20	0.002	685	2	0.60 N	1.53	0.380	15
HD05002		37 59 12	120 40 37	6.000	8.06	320	7.000	295	2	0.60 N	1.27	0.630	9
HD05007		37 59 12	120 40 37	4.800	5.78	310	1.600	205	1	0.60 N	5.51	0.190	4 L
HD05012		37 59 12	120 40 37	1.700	6.24	130	0.450	171	1 L	0.60 N	8.26	0.770	4 L
HD05022		37 59 12	120 40 37	16.000	3.59	160	26.000	143	1 L	0.60 N	5.68	0.180	4 L
HD05032		37 59 12	120 40 37	4.500	4.84	120	5.900	162	1 L	0.60 N	7.65	0.310	4 L
HD05042		37 59 12	120 40 37	0.400	2.94	80	0.200	92	1 L	0.60 N	7.14	0.076	4 L
HD05052		37 59 12	120 40 37	5.400	3.50	340	2.700	105	1 L	0.60 N	7.88	0.200	5
HD05062		37 59 12	120 40 37	1.300	4.40	150	2.500	113	1 L	0.60 N	6.64	0.130	4 L
HD05072		37 59 12	120 40 37	3.400	1.89	160	10.000	88	1 L	0.60 N	5.17	0.100	4 L
HD05082		37 59 12	120 40 37	0.730	5.41	160	0.200	143	1	0.60 N	6.75	0.120	4
HD05092		37 59 12	120 40 37	1.300	1.99	200	0.150	80	1 L	0.60 N	8.55	0.096	4 L
HD05102		37 59 12	120 40 37	3.500	3.88	170	0.350	122	1 L	0.60 N	7.44	0.210	4 L
HD05112		37 59 12	120 40 37	2.300	5.64	140	0.450	154	1	0.60 N	5.86	0.120	4 L
HD05117		37 59 12	120 40 37	0.420	4.92	60	0.006	390	1	0.60 N	2.73	0.320	20

Appendix 1.--continued

Sam. ID	Co ppm icp	Cr ppm icp	Cu ppm icp	Eu ppm icp	Fe % icp	Ga ppm icp	Hg ppm aa	K % icp	La ppm icp	Li ppm icp	LOI % grav	Mg % icp	Mn ppm icp	Mo ppm picp
HD02162	16	85	58	2 L	4.88	13	0.40	1.98	10	8	7.82	1.64	731	1.00
HD02172	14	83	44	2 L	4.87	12	0.26	1.55	8	14	9.50	1.84	735	0.88
HD02182	16	97	56	2 L	4.39	14	0.22	1.55	9	41	6.57	1.60	871	1.10
HD02192	19	99	59	2 L	4.91	16	0.18	1.66	11	44	6.91	1.63	1060	1.20
HD02202	17	115	65	2 L	4.97	18	0.16	1.84	9	52	6.35	1.66	639	1.30
HD03002	17	88	36	2 L	4.66	16	0.12	1.25	18	40	5.82	1.24	677	0.66
HD03007	18	122	96	2 L	4.88	17	0.24	2.26	9	45	4.31	1.68	452	0.99
HD03012	17	113	59	2 L	4.63	17	0.20	2.15	10	46	4.05	1.66	410	0.94
HD03022	12	89	45	2 L	4.17	14	0.22	1.72	10	43	3.47	1.51	397	0.50
HD03032	25	218	57	2 L	4.43	13	0.14	1.10	8	64	7.81	2.66	1010	0.57
HD03042	23	191	60	2 L	3.87	12	0.22	1.07	8	58	7.41	2.23	1070	0.96
HD03052	27	154	70	2 L	4.95	14	0.16	1.34	9	68	6.60	2.53	958	1.00
HD03062	23	150	60	2 L	4.18	12	0.18	1.17	7	59	8.85	1.98	1410	1.10
HD03072	24	115	65	2 L	4.82	16	0.16	2.13	14	53	6.57	1.78	810	1.60
HD03082	28	127	64	2 L	4.66	16	0.22	2.27	9	48	4.78	1.62	571	1.30
HD03092	31	118	77	2 L	5.11	17	0.26	2.17	11	55	6.13	1.78	771	1.90
HD03102	38	128	80	2 L	5.43	18	0.28	2.37	16	54	5.14	1.80	616	2.40
HD04002	19	130	83	2 L	4.90	17	0.12	2.72	17	11	5.21	0.64	654	1.30
HD04007	14	85	52	2 L	4.20	12	0.20	1.95	10	7	4.19	0.53	387	1.20
HD04012	11	48	51	2 L	3.77	9	0.14	1.50	8	4	4.35	0.67	315	1.20
HD04022	11	37	30	2 L	2.80	11	0.04	1.50	7	3	7.08	1.36	502	0.38
HD04032	11	22	24	2 L	2.72	15	0.02	2.05	10	4	9.00	1.56	458	0.10
HD04042	14	50	33	2 L	3.02	17	0.04	1.61	12	17	9.54	1.98	546	0.10
HD04052	14	99	35	2 L	3.35	11	0.04	1.67	9	4	10.30	2.29	793	0.23
HD04062	18	69	54	2 L	4.52	12	0.12	1.84	9	4	9.71	1.98	857	1.00
HD04072	12	94	30	2 L	3.30	10	0.12	0.97	5	11	8.29	1.56	670	0.57
HD04082	12	80	31	2 L	3.26	10	0.10	1.27	9	4	8.59	1.66	579	0.64
HD04092	15	95	51	2 L	3.91	12	0.08	1.43	7	40	7.02	1.72	745	0.88
HD04102	15	88	55	2 L	4.39	15	0.10	1.66	7	48	6.04	1.68	709	1.20
HD04112	21	107	66	2 L	4.41	15	0.16	1.61	9	49	5.55	1.74	755	1.20
HD04117	19	113	63	2 L	4.46	16	0.16	1.77	8	52	5.41	1.73	686	1.40
HD05002	43	456	183	2 L	8.49	16	0.22	2.62	5	7	7.77	1.11	428	1.40
HD05007	25	139	87	2 L	4.72	11	0.20	2.01	3	3	9.90	0.89	595	0.32
HD05012	35	253	89	2 L	5.11	11	0.24	1.83	4	2 L	13.80	1.29	896	0.95
HD05022	18	127	75	2 L	3.37	7	0.36	1.35	2	2 L	11.10	1.67	623	0.30
HD05032	25	186	80	2 L	4.44	8	0.32	1.66	4	3	14.50	2.16	847	0.50
HD05042	14	152	38	2 L	3.94	6	0.02	0.94	3	2 L	15.20	3.13	903	0.13
HD05052	18	160	126	2 L	4.87	8	0.16	1.23	4	2 L	17.50	4.05	938	0.22
HD05062	20	78	76	2 L	4.67	9	0.06	1.38	3	2 L	15.20	3.44	920	0.14
HD05072	11	79	54	2 L	3.08	5	0.08	0.74	2	2 L	10.40	2.62	634	0.09
HD05082	19	176	36	2 L	3.35	13	0.04	1.73	4	2	17.30	4.60	1170	0.11
HD05092	22	690	23	2 L	3.14	6	0.02 N	0.84	2	2 L	21.40	5.79	1050	0.19
HD05102	17	174	67	2 L	3.54	9	0.08	1.26	3	2 L	17.10	4.32	995	0.13
HD05112	23	272	89	2 L	4.37	11	0.10	1.82	4	2	18.40	5.23	1050	0.10
HD05117	15	105	62	2 L	4.20	11	0.12	1.31	10	26	8.04	2.00	759	0.70

Appendix 1.--continued

Sam. ID	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	S %	Sb ppm	Sc ppm	SiO ₂ %	Sr ppm	Te ppm	Th ppm
	icp	icp	icp	icp	icp	icp	comb	picp	icp	xrf	icp	aa	icp
HD02162	1.04	4	L	13	60	0.080	16	1.75	2.50	13	59.10	294	0.045
HD02172	1.49	4	L	9	47	0.090	11	0.47	2.20	13	60.80	290	0.035
HD02182	1.34	4	L	11	53	0.090	13	0.41	1.60	14	63.10	230	0.045
HD02192	1.07	4	L	14	55	0.110	16	0.49	1.50	16	61.30	252	0.055
HD02202	1.40	4	L	13	66	0.140	17	0.42	1.20	17	59.60	188	0.050
HD03002	0.81	7		20	44	0.090	25	0.05	L	1.00	12	68.30	128
HD03007	0.51	4	L	9	75	0.110	13	0.30	2.40	14	66.70	58	0.090
HD03012	0.53	4	L	12	71	0.100	9	0.36	1.80	14	67.80	60	0.120
HD03022	0.47	4	L	9	60	0.090	9	0.14	1.70	11	72.00	58	0.100
HD03032	1.04	4	L	13	74	0.070	16	0.57	1.60	17	58.70	598	0.045
HD03042	0.76	4	L	11	95	0.070	22	0.63	3.00	13	62.60	476	0.040
HD03052	1.22	4	L	12	88	0.100	13	0.56	3.10	16	60.00	277	0.040
HD03062	0.91	4	L	12	78	0.090	16	0.47	2.90	14	58.10	465	0.030
HD03072	0.95	4	L	15	73	0.140	22	0.54	4.30	17	58.20	229	0.060
HD03082	0.99	4	L	10	77	0.100	17	0.70	3.90	16	61.80	152	0.045
HD03092	0.81	4	L	15	81	0.210	28	0.58	4.20	16	59.10	215	0.065
HD03102	0.74	4	L	18	86	0.140	37	0.84	4.70	18	60.00	139	0.150
HD04002	0.49	4	L	20	128	0.120	61	0.05	L	3.50	18	65.00	59
HD04007	0.37	4	L	10	66	0.080	43	0.05	L	3.50	12	73.50	74
HD04012	0.28	4	L	9	46	0.050	27	0.05	L	2.70	9	76.50	63
HD04022	1.24	4	L	8	25	0.050	7	0.05	L	0.80	9	68.10	268
HD04032	2.15	4	L	10	24	0.060	8	0.05	0.60	9	59.10	306	0.005
HD04042	2.46	4	L	14	42	0.070	5	0.08	0.60	N	11	56.10	333
HD04052	0.71	4	L	10	57	0.050	8	0.49	0.72	11	61.50	429	0.015
HD04062	0.63	4	L	11	52	0.100	26	0.70	2.30	13	61.30	295	0.045
HD04072	1.90	4	L	7	45	0.060	11	0.25	1.70	11	64.60	248	0.015
HD04082	1.42	4	L	11	45	0.060	23	0.71	1.60	11	64.10	393	0.025
HD04092	1.14	4	L	8	58	0.090	14	0.23	1.50	14	65.20	246	0.030
HD04102	1.49	4	L	10	49	0.100	27	0.28	1.50	16	62.80	213	0.040
HD04112	1.42	4	L	11	64	0.110	18	0.45	1.90	16	63.20	183	0.045
HD04117	1.35	4	L	10	66	0.110	21	0.45	1.90	16	62.60	167	0.045
HD05002	1.03	4	L	8	130	0.020	110	0.05	L	33.00	42	54.90	83
HD05007	0.88	4	L	5	59	0.008	45	0.05	L	11.00	25	58.70	91
HD05012	1.60	4	L	8	61	0.030	29	0.05	L	4.40	37	48.40	139
HD05022	0.34	4	L	5	35	0.009	289	0.05	L	3.60	20	63.80	212
HD05032	0.76	4	L	6	51	0.030	29	0.05	L	2.50	27	52.50	257
HD05042	0.57	4	L	4	30	0.020	5	0.05	L	0.60	N	19	56.70
HD05052	0.57	4	L	8	50	0.008	8	0.28	4.30	26	48.00	616	0.015
HD05062	0.97	4	L	4	38	0.040	6	0.45	1.20	25	50.60	442	0.010
HD05072	0.13	4	L	4	38	0.005	L	14	0.91	3.20	13	67.10	442
HD05082	1.36	4	L	7	80	0.007	4	0.33	1.70	24	46.00	565	0.005
HD05092	0.07	4	L	6	174	0.005	L	10	0.13	5.60	20	47.40	885
HD05102	0.85	4	L	4	74	0.005	L	6	0.63	7.50	22	49.30	673
HD05112	1.29	4	L	7	116	0.010	7	0.29	3.80	25	43.30	506	
HD05117	0.90	4	L	10	52	0.090	13	0.40	1.50	13	64.80	344	0.035

Appendix 1.--continued

Sam. ID	Ti % icp	Tl ppm aa	V ppm icp	W ppm aa	Y ppm icp	Yb ppm icp	Zn ppm , icp	Geologic unit
HD02162	0.070	0.30	109	5.5	10	1 L	158	Salt Spring Slate
HD02172	0.080	0.20	93	4.0	9	1 L	160	Salt Spring Slate
HD02182	0.130	0.20	122	2.5	11	1	135	Salt Spring Slate
HD02192	0.190	0.15	138	2.5	13	1	131	Salt Spring Slate
HD02202	0.200	0.15	156	2.5	14	2	147	Salt Spring Slate
HD03002	0.260	0.10	144	1.5	14	2	101	Copper Hill Volcanics (?)
HD03007	0.090	0.15	151	1.0	11	1	124	Copper Hill Volcanics (?)
HD03012	0.110	0.20	140	1.0	11	2	123	Copper Hill Volcanics (?)
HD03022	0.080	0.15	121	1.0	8	1	101	Copper Hill Volcanics (?)
HD03032	0.170	0.10	139	1.0	11	1	85	Salt Spring Slate
HD03042	0.150	0.15	108	1.0	11	1	84	Salt Spring Slate
HD03052	0.260	0.15	151	1.0	12	1	117	Salt Spring Slate
HD03062	0.160	0.20	119	1.5	12	1	99	Salt Spring Slate
HD03072	0.300	0.25	159	1.0	16	2	133	Salt Spring Slate
HD03082	0.260	0.20	158	1.5	13	2	140	Salt Spring Slate
HD03092	0.250	0.20	161	2.0	17	2	144	Salt Spring Slate
HD03102	0.370	0.30	175	1.0	17	2	152	Salt Spring Slate
HD04002	0.110	0.40	153	3.0	13	2	166	Salt Spring Slate, tuffaceous member
HD04007	0.100	0.35	112	5.0	9	1	100	Salt Spring Slate, tuffaceous member
HD04012	0.060	0.25	76	4.0	6	1 L	81	Salt Spring Slate, tuffaceous member
HD04022	0.090	0.20	73	5.5	5	1 L	50	Salt Spring Slate, tuffaceous member
HD04032	0.090	0.30	81	2.0	4	1 L	40	Salt Spring Slate, tuffaceous member (?)
HD04042	0.160	0.25	100	2.0	5	1 L	47	Salt Spring Slate, tuffaceous member (?)
HD04052	0.080	0.15	76	5.0	7	1 L	63	Salt Spring Slate
HD04062	0.080	0.25	99	4.0	10	1 L	108	Salt Spring Slate
HD04072	0.080	0.10	78	2.0	8	1 L	79	Salt Spring Slate
HD04082	0.090	0.15	78	6.0	9	1 L	70	Salt Spring Slate
HD04092	0.110	0.10	110	2.0	10	1	103	Salt Spring Slate
HD04102	0.110	0.15	127	2.0	11	1	111	Salt Spring Slate
HD04112	0.190	0.15	136	2.0	14	1	120	Salt Spring Slate
HD04117	0.140	0.25	144	2.0	13	1	123	Salt Spring Slate
HD05002	0.090	0.50	249	4.5	7	1 L	393	Salt Spring Slate, tuffaceous member
HD05007	0.060	0.30	169	10.0	4	1 L	83	Salt Spring Slate, tuffaceous member
HD05012	0.060	0.30	190	8.0	4	1 L	285	Salt Spring Slate, tuffaceous member
HD05022	0.040	0.15	114	5.0	4	1 L	114	Salt Spring Slate, tuffaceous member
HD05032	0.060	0.20	152	6.0	4	1 L	128	Salt Spring Slate, tuffaceous member
HD05042	0.030	0.20	90	3.0	4	1 L	30	Salt Spring Slate, tuffaceous member
HD05052	0.040	0.25	112	4.0	6	1 L	67	Salt Spring Slate, tuffaceous member
HD05062	0.050	0.20	136	4.0	4	1 L	41	Salt Spring Slate, tuffaceous member
HD05072	0.020	0.15	58	3.0	4	1 L	32	Salt Spring Slate, tuffaceous member
HD05082	0.060	0.20	152	4.5	6	1 L	39	Salt Spring Slate, tuffaceous member
HD05092	0.020	0.20	69	1.0	6	1 L	21	Salt Spring Slate, tuffaceous member
HD05102	0.060	0.25	119	2.5	6	1 L	82	Salt Spring Slate, tuffaceous member
HD05112	0.050	0.30	149	3.0	6	1 L	36	Salt Spring Slate, tuffaceous member
HD05117	0.090	0.15	94	2.5	10	1	104	Salt Spring Slate

Appendix 1.--continued

Sam. ID	Latitude	Longitude	Ag ppm picp	Al % icp	As ppm icp	Au ppm aa	Ba ppm icp	Be ppm icp	Bi ppm picp	Ca % icp	Cd ppm picp	Ce ppm icp
HD05122	37 59 12	120 40 37	1.000	4.91	60	0.050	386	1	0.60 N	2.74	0.370	18
HD05132	37 59 12	120 40 37	0.140	7.01	30	0.002 N	716	1	0.60 N	1.85	0.200	21
HD05142	37 59 12	120 40 37	0.160	7.01	20	0.002	770	2	0.60 N	1.74	0.140	19
HD05152	37 59 12	120 40 37	0.150	6.64	20	0.002 L	619	1	0.60 N	2.71	0.200	12
HD05162	37 59 12	120 40 37	0.170	7.48	20	0.002 N	733	2	0.60 N	1.58	0.400	18
HD05172	37 59 12	120 40 37	0.600	5.43	10 L	0.700	390	1 L	0.60 N	2.41	0.230	15
HD05182	37 59 12	120 40 37	0.150	6.70	20	0.002 N	627	1	0.60 N	2.30	0.290	12
HD05192	37 59 12	120 40 37	0.160	6.77	10	0.002 L	740	1	0.60 N	1.93	0.180	13
HD05202	37 59 12	120 40 37	0.220	6.72	30	0.012	409	1	0.60 N	2.09	0.980	31
HD05212	37 59 12	120 40 37	0.046	7.19	10 L	0.002 N	80	1 L	0.60 N	9.35	0.190	6
HD05222	37 59 12	120 40 37	0.094	7.59	30	0.002 N	108	1 L	0.60 N	6.32	0.140	7
HD05232	37 59 12	120 40 37	0.170	7.20	20	0.002 N	699	1	0.60 N	2.05	0.190	19
HD05242	37 59 12	120 40 37	0.110	5.20	40	0.002 N	464	1	0.60 N	3.46	0.300	20
HD06002	37 59 12	120 40 37	0.860	8.03	210	0.650	251	1	0.60 N	0.18	0.055	11
HD06007	37 59 12	120 40 37	0.190	7.56	100	0.010	108	1 L	0.60 N	3.86	0.080	8
HD06012	37 59 12	120 40 37	0.140	6.07	150	0.004	66	1 L	0.60 N	5.55	0.080	7
HD06022	37 59 12	120 40 37	0.150	7.03	110	0.014	141	1 L	0.60 N	7.74	0.087	8
HD06032	37 59 12	120 40 37	0.240	7.70	40	0.002	108	1 L	0.60 N	4.50	0.140	9
HD06042	37 59 12	120 40 37	0.340	5.28	70	0.500	210	1 L	0.60 N	4.25	0.260	12
HD06052	37 59 12	120 40 37	0.480	5.75	100	0.002 N	419	1	0.60 N	3.82	0.210	18
HD06062	37 59 12	120 40 37	0.160	6.93	30	0.002 N	585	1	0.60 N	2.48	0.390	16
HD06072	37 59 12	120 40 37	0.150	6.88	30	0.002 L	328	1	0.60 N	2.89	0.210	14
HD06082	37 59 12	120 40 37	0.510	7.12	30	0.002 L	284	1 L	0.60 N	3.73	0.260	9
HD06092	37 59 12	120 40 37	0.490	7.71	70	0.002 N	613	2	0.60 N	0.63	0.320	26
HD06097	37 59 12	120 40 37	0.250	6.96	30	0.002 N	716	2	0.60 N	1.63	0.390	23
HD07010	37 59 12	120 40 37	0.053	7.11	10 L	0.004	82	1 L	0.60 N	4.66	0.053	4 L
HD07020	37 59 12	120 40 37	0.052	5.43	10 L	0.002	44	1 L	0.60 N	6.09	0.048	4 L
HD07030	37 59 12	120 40 37	0.055	5.67	10	0.002	37	1 L	0.60 N	6.44	0.062	4 L
HD07040	37 59 12	120 40 37	0.054	6.18	10 L	0.002	39	1 L	0.60 N	4.81	0.037	4 L
HD07050	37 59 12	120 40 37	0.053	5.79	10 L	0.004	25	1 L	0.60 N	5.81	0.084	4 L
HD07059	37 59 12	120 40 37	0.088	5.82	20	0.004	32	1 L	0.60 N	5.65	0.066	4 L
HD07063	37 59 12	120 40 37	2.500	6.63	250	0.100	202	1	0.60 N	1.49	0.130	31
HD07068	37 59 12	120 40 37	8.200	7.58	240	18.000	160	1	0.60 N	3.64	0.160	6
HD07080	37 59 12	120 40 37	4.400	5.56	150	0.300	166	1 L	0.60 N	6.16	0.150	4
HD07090	37 59 12	120 40 37	7.500	6.32	160	16.000	116	1	0.60 N	6.36	0.078	4 L
HD07100	37 59 12	120 40 37	4.600	5.11	40	4.800	229	1 L	0.60 N	5.45	0.100	4 L
HD07110	37 59 12	120 40 37	2.400	7.21	100	0.950	281	1	0.60 N	6.09	0.110	4 L
HD07122	37 59 12	120 40 37	1.400	7.05	110	1.100	294	1	0.60 N	5.82	0.090	4 L
HD07130	37 59 12	120 40 37	0.710	3.17	190	0.450	140	1 L	0.60 N	3.04	0.045	4 L
HD07140	37 59 12	120 40 37	1.800	7.66	260	0.004	151	2	0.60 N	2.56	0.350	31
HD07150	37 59 12	120 40 37	0.230	9.12	40	0.002 N	443	2	0.60 N	0.73	0.190	38
HD08002	37 59 12	120 40 37	0.230	6.22	30	0.032	133	1 L	0.60 N	3.35	0.074	7
HD08007	37 59 12	120 40 37	0.054	6.09	10 L	0.002	75	1 L	0.60 N	5.66	0.046	4 L
HD08012	37 59 12	120 40 37	0.061	6.03	10 L	0.002	69	1 L	0.60 N	6.20	0.053	4 L
HD08022	37 59 12	120 40 37	0.045 N	6.73	10 L	0.002	88	1 L	0.60 N	7.01	0.073	4 L

Appendix 1.--continued

Sam. ID	Co ppm icp	Cr ppm icp	Cu ppm icp	Eu ppm icp	Fe % icp	Ga ppm icp	Hg ppm aa	K % icp	La ppm icp	Li ppm icp	LOI % grav	Mg % icp	Mn ppm icp	Mo ppm picp
HD05122	13	110	55	2 L	4.19	11	0.12	1.27	9	27	8.12	2.02	752	0.87
HD05132	14	82	54	2 L	4.67	16	0.10	1.90	11	25	6.85	1.56	533	0.74
HD05142	15	82	56	2 L	4.68	16	0.08	2.14	10	38	5.47	1.34	555	0.83
HD05152	16	85	58	2 L	4.23	14	0.16	1.77	7	40	5.39	1.34	787	0.63
HD05162	20	127	69	2 L	4.68	17	0.10	1.97	9	50	5.27	1.77	670	1.40
HD05172	13	131	31	2 L	2.96	12	0.08	1.00	8	38	4.85	1.40	604	0.45
HD05182	19	116	58	2 L	4.36	14	0.10	1.57	7	47	5.39	1.55	780	0.84
HD05192	16	85	54	2 L	4.32	15	0.10	1.88	8	44	5.00	1.40	740	0.70
HD05202	18	101	107	2 L	4.35	15	0.24	1.02	17	45	4.37	1.60	901	2.20
HD05212	33	53	104	2 L	4.76	12	0.04	0.05 L	5	75	13.50	3.19	1350	0.21
HD05222	35	59	116	2 L	5.54	13	0.04	0.22	5	69	13.10	3.78	955	0.21
HD05232	17	99	53	2 L	4.84	16	0.08	1.76	10	47	5.76	1.60	800	0.60
HD05242	14	71	53	2 L	4.39	11	0.08	1.24	9	32	8.37	1.77	819	0.72
HD06002	46	403	99	2 L	6.06	15	0.04	2.04	5	11	6.64	0.67	643	0.50
HD06007	36	423	84	2 L	5.56	14	0.02	1.18	6	30	9.75	2.73	908	0.22
HD06012	46	1240	67	2 L	5.36	12	0.02 N	0.88	5	39	14.20	4.68	927	0.13
HD06022	30	325	76	2 L	4.59	12	0.02	1.85	6	6	14.40	2.03	823	0.12
HD06032	21	123	106	2 L	4.98	12	0.02	1.28	6	10	11.60	2.70	795	0.10
HD06042	13	167	40	2 L	3.62	10	0.04	1.55	7	4	10.80	2.49	734	2.90
HD06052	16	196	59	2 L	4.29	12	0.06	2.18	10	6	11.30	2.54	1020	0.99
HD06062	24	227	73	2 L	4.51	15	0.10	1.86	9	48	7.96	2.68	1110	0.85
HD06072	29	306	74	2 L	5.02	13	0.06	0.94	9	91	9.56	5.13	1130	0.55
HD06082	21	112	115	2 L	4.72	13	0.16	1.57	7	9	11.50	3.47	1010	1.20
HD06092	21	124	65	2 L	4.82	17	0.18	2.48	13	5	8.41	1.70	623	1.60
HD06097	18	105	66	2 L	4.67	15	0.10	2.39	12	19	8.75	2.08	922	1.00
HD07010	51	591	86	2 L	7.06	14	0.02 N	0.07	3	22	6.86	5.86	1200	0.12
HD07020	76	1270	75	2 L	7.42	11	0.04	0.18	3	32	6.14	11.10	1280	0.09 N
HD07030	75	940	90	2 L	7.30	12	0.04	0.12	3	34	5.53	10.80	1310	0.09 N
HD07040	61	808	96	2 L	6.90	11	0.08	0.07	3	29	4.93	9.08	1210	0.09 N
HD07050	71	1020	100	2 L	7.40	12	0.06	0.05 L	3	37	7.31	10.90	1270	0.09 N
HD07059	59	825	81	2 L	6.81	11	0.08	0.05 L	3	46	12.60	9.12	1090	0.09 N
HD07063	43	666	61	2 L	5.45	14	0.16	1.62	15	68	6.86	5.42	319	0.84
HD07068	39	141	27	2 L	6.72	15	0.10	3.08	4	9	8.29	2.86	489	0.24
HD07080	29	267	70	2 L	4.51	11	0.10	2.10	5	3	13.30	4.17	875	0.16
HD07090	31	119	43	2 L	7.03	13	0.10	2.65	3	3	13.00	4.44	896	0.26
HD07100	31	229	55	2 L	5.02	10	0.04	2.16	2	3	8.34	3.32	648	0.17
HD07110	40	140	110	2 L	5.85	14	0.08	2.88	3	3	13.50	4.07	924	3.60
HD07122	31	108	78	2 L	4.62	15	2.90	2.70	4	3	14.00	3.82	843	1.20
HD07130	13	144	23	2 L	2.32	8	0.04	1.29	2	2 L	6.12	1.69	404	0.17
HD07140	29	94	79	2 L	6.11	17	0.08	2.89	17	3	9.94	2.01	760	1.40
HD07150	29	132	81	2 L	5.70	20	0.16	2.48	19	53	5.16	1.75	560	4.20
HD08002	58	771	85	2 L	6.63	12	0.02 N	0.41	5	20	7.74	4.59	1210	0.28
HD08007	56	719	88	2 L	6.58	12	0.02 N	0.16	4	17	6.05	7.48	1150	0.17
HD08012	55	661	81	2 L	6.56	12	0.02	0.18	4	16	5.38	7.60	1130	0.25
HD08022	52	516	82	2 L	6.90	14	0.02 N	0.21	5	13	3.73	6.94	1260	0.19

Appendix 1.--continued

Sam. ID	Na % icp	Nb ppm icp	Nd ppm icp	Ni ppm icp	P % icp	Pb ppm icp	S % comb	Sb ppm picp	Sc ppm icp	SiO ₂ % xrf	Sr ppm icp	Te ppm aa	Th ppm icp
HD05122	0.92	4 L	11	55	0.090	12	0.35	1.70	13	64.90	341	0.030	4 L
HD05132	1.55	4	10	35	0.080	17	0.25	1.10	14	62.20	211	0.040	7
HD05142	0.87	6	9	30	0.100	19	0.25	1.10	15	64.50	126	0.040	7
HD05152	1.09	4	10	36	0.090	21	0.56	1.40	13	63.90	236	0.800	5
HD05162	1.13	4 L	11	71	0.110	19	0.42	1.30	16	62.40	138	0.045	5
HD05172	1.63	4 L	10	52	0.050	11	0.13	0.79	11	70.30	240	0.015	4 L
HD05182	1.34	4 L	9	55	0.090	15	0.45	1.20	14	64.10	219	0.040	4
HD05192	0.91	5	9	36	0.090	18	0.38	1.30	14	65.70	193	0.035	6
HD05202	2.44	4	16	64	0.100	19	1.05	3.20	14	63.70	230	0.800	6
HD05212	3.74	4 L	9	27	0.080	5	0.26	0.80	31	41.40	1120	0.010	4 L
HD05222	3.71	4 L	7	27	0.060	5	0.18	0.98	34	43.40	635	0.005	4 L
HD05232	1.34	5	12	39	0.110	17	0.34	1.30	16	62.40	197	0.040	7
HD05242	0.94	4 L	12	42	0.090	20	0.31	0.97	13	63.20	468	0.025	4 L
HD06002	1.33	4 L	8	146	0.030	8	0.05 L	3.70	38	61.40	60	0.030	4 L
HD06007	2.48	4 L	9	165	0.050	6	0.05 L	0.99	36	52.70	157	0.005	4 L
HD06012	1.87	4 L	8	476	0.040	5	0.05 L	1.30	32	45.80	253	0.005	4 L
HD06022	2.29	4 L	10	137	0.040	4	0.05 L	1.20	29	45.20	207	0.005 L	4 L
HD06032	3.61	4 L	10	55	0.070	4 L	0.05 L	0.71	31	48.30	281	0.005	4 L
HD06042	1.44	4 L	8	50	0.050	12	0.05 L	1.10	15	59.20	384	0.045	4 L
HD06052	0.52	4 L	10	80	0.070	18	0.05 L	1.90	17	57.70	359	0.030	4
HD06062	0.92	4 L	12	109	0.100	15	0.32	2.00	20	58.80	221	0.040	6
HD06072	1.16	4 L	13	138	0.080	11	0.16	1.20	24	53.30	299	0.025	5
HD06082	2.62	4 L	10	40	0.110	17	1.33	3.90	26	48.30	387	0.090	4 L
HD06092	1.41	4 L	14	79	0.110	16	0.72	4.70	17	58.90	103	0.055	7
HD06097	0.73	4 L	14	67	0.110	15	0.35	2.30	16	59.40	152	0.045	5
HD07010	2.54	4 L	7	193	0.020	4 L	0.05 L	0.60 N	36	50.10	165	0.005 L	4 L
N HD07020	0.81	4 L	9	479	0.020	5	0.05 L	0.60 N	45	60.20	31	0.005 L	4 L
N HD07030	1.05	4 L	8	435	0.020	7	0.05 L	0.60 N	39	46.40	38	0.005 L	4 L
N HD07D40	2.23	4 L	7	284	0.020	6	0.05 L	0.60 N	40	49.60	68	0.020	4 L
N HD07050	1.16	4 L	7	426	0.020	5	0.05 L	0.60 N	39	44.60	59	0.025	4 L
N HD07059	0.50	4 L	7	320	0.010	4 L	0.05 L	0.60 N	37	43.90	205	0.010	4 L
HD07063	0.44	4 L	17	245	0.050	23	1.66	3.00	20	57.30	63	0.100	6
HD07068	0.11	4 L	9	82	0.030	38	5.25	1.70	31	54.20	223	0.200	4 L
HD07080	0.60	4 L	10	95	0.020	8	2.40	25.00	26	46.70	491	0.300	4 L
HD07090	0.15	4 L	8	73	0.008	14	4.58	6.60	34	37.90	579	0.400	4 L
HD07100	0.11	4 L	5	73	0.020	9	4.44	10.00	28	54.70	371	0.900	4 L
HD07110	0.24	4 L	10	62	0.007	9	2.93	4.30	36	39.80	482	0.750	4 L
HD07122	0.49	4 L	8	48	0.006	14	1.85	2.90	31	44.50	520	0.200	4 L
HD07130	0.11	4 L	4 L	28	0.005 L	6	1.20	0.98	16	73.20	282	0.040	4 L
HD07140	0.44	4 L	20	117	0.130	29	2.59	3.50	17	51.10	302	0.100	7
HD07150	1.15	4 L	22	70	0.090	23	0.86	2.20	20	58.70	81	0.100	10
HD08002	1.34	4 L	6	278	0.020	19	0.05 L	2.00	35	56.00	69	0.300	4 L
HD08007	2.01	4 L	5	324	0.030	6	0.05 L	0.60 N	40	49.90	70	0.850	4 L
HD08012	1.88	4 L	6	310	0.030	7	0.05 L	0.60 N	40	49.60	78	0.005 L	4 L
HD08022	2.24	4 L	9	232	0.040	7	0.05 L	0.60 N	42	49.00	92	0.005 L	4 L

Appendix 1.--continued

Sam. ID	Ti % icp	Tl ppm aa	V ppm icp	W ppm aa	Y ppm icp	Yb ppm icp	Zn ppm icp	Geologic unit
HD05122	0.130	0.15	94	2.0	10	1	96	Salt Spring Slate
HD05132	0.130	0.20	117	2.0	10	1	113	Salt Spring Slate
HD05142	0.250	0.15	123	1.0	13	2	106	Salt Spring Slate
HD05152	0.160	0.15	119	1.5	12	2	103	Salt Spring Slate
HD05162	0.200	0.30	146	1.5	14	2	146	Salt Spring Slate
HD05172	0.160	0.10	86	1.0	9	1	78	Salt Spring Slate
HD05182	0.110	0.15	126	1.0	12	1	113	Salt Spring Slate
HD05192	0.190	0.20	120	1.0	12	2	107	Salt Spring Slate
HD05202	0.190	0.15	166	1.5	13	2	191	Salt Spring Slate
HD05212	0.140	0.05 N	211	0.5 L	9	1 L	42	Salt Spring Slate
HD05222	0.190	0.05 L	237	1.0	9	1	49	Salt Spring Slate
HD05232	0.210	0.15	136	1.5	14	2	109	Salt Spring Slate
HD05242	0.060	0.20	93	2.5	11	1	111	Salt Spring Slate
HD06002	0.150	0.40	247	4.5	6	1 L	54	Salt Spring Slate, tuffaceous member
HD06007	0.160	0.15	237	2.5	6	1 L	51	Salt Spring Slate, tuffaceous member
HD06012	0.090	0.10	186	2.5	6	1 L	42	Salt Spring Slate, tuffaceous member
HD06022	0.080	0.20	202	4.0	5	1 L	42	Salt Spring Slate, tuffaceous member
HD06032	0.130	0.10	220	2.5	5	1 L	43	Salt Spring Slate, tuffaceous member
HD06042	0.060	0.20	98	4.5	5	1 L	62	Salt Spring Slate, tuffaceous member
HD06052	0.090	0.10	131	4.0	8	1 L	73	Salt Spring Slate, tuffaceous member
HD06062	0.110	0.15	153	2.0	10	1	105	Salt Spring Slate, tuffaceous member
HD06072	0.150	0.05	180	1.5	9	1	71	Salt Spring Slate, tuffaceous member
HD06082	0.180	0.15	223	1.5	8	1 L	60	Salt Spring Slate (?)
HD06092	0.210	0.35	162	2.5	12	2	133	Salt Spring Slate (?)
HD06097	0.100	0.25	140	2.0	11	1	125	Salt Spring Slate (?)
HD07010	0.270	0.05 N	217	1.0	12	2	56	Copper Hill Volcanics
HD07020	0.300	0.05 N	210	0.5	10	2	51	Copper Hill Volcanics
HD07030	0.260	0.05 L	188	1.0	10	1	50	Copper Hill Volcanics
HD07040	0.260	0.05 N	194	1.0	8	1	52	Copper Hill Volcanics
HD07050	0.240	0.05 N	200	1.0	10	2	53	Copper Hill Volcanics
HD07059	0.190	0.05 N	208	1.0	9	1	50	Copper Hill Volcanics
HD07063	0.090	0.15	154	8.0	9	1	83	Salt Spring Slate, tuffaceous member
HD07068	0.050	0.55	238	5.5	4	1 L	64	Salt Spring Slate, tuffaceous member
HD07080	0.050	0.35	173	6.5	5	1 L	53	Salt Spring Slate, tuffaceous member
HD07090	0.040	0.40	200	7.5	5	1 L	33	Salt Spring Slate, tuffaceous member
HD07100	0.030	0.50	162	3.0	3	1 L	24	Salt Spring Slate, tuffaceous member
HD07110	0.050	0.50	234	7.0	5	1 L	43	Salt Spring Slate, tuffaceous member
HD07122	0.050	0.45	199	9.0	5	1 L	36	Salt Spring Slate, tuffaceous member
HD07130	0.030	0.20	103	4.5	3	1 L	12	Salt Spring Slate, tuffaceous member
HD07140	0.050	0.30	147	7.0	13	1	152	Salt Spring Slate
HD07150	0.180	0.20	180	1.5	13	2	129	Salt Spring Slate
HD08002	0.250	0.10	181	2.0	11	1	57	Copper Hill Volcanics
HD08007	0.290	0.05 L	195	1.0	12	1	50	Copper Hill Volcanics
HD08012	0.290	0.05 L	205	1.0	11	2	47	Copper Hill Volcanics
HD08022	0.340	0.05 L	242	1.0	12	2	52	Copper Hill Volcanics

Appendix 1.--continued

Sam.	ID	Latitude	Longitude	Ag ppm picp	Al % icp	As ppm icp	Au ppm aa	Ba ppm icp	Be ppm icp	Bi ppm picp	Ca % icp	Cd ppm picp	Ce ppm icp
HD08032		37 59 12	120 40 37	0.045 N	5.44	10 L	0.002	34	1 L	0.60 N	6.20	0.032	4 L
HD08042		37 59 12	120 40 37	0.045 N	3.93	10 L	0.004	78	1 L	0.60 N	13.50	0.097	4 L
HD08052		37 59 12	120 40 37	2.100	4.30	220	0.100	157	1 L	0.60 N	3.49	0.340	15
HD08062		37 59 12	120 40 37	3.000	5.81	70	0.046	65	1	0.60 N	7.95	0.062	4 L
HD08072		37 59 12	120 40 37	0.490	6.24	40	0.030	137	1 L	0.60 N	5.45	0.075	4 L
HD08082		37 59 12	120 40 37	1.400	6.06	30	0.050	178	1 L	0.60 N	7.93	1.200	7
HD08092		37 59 12	120 40 37	7.800	5.65	120	0.550	188	1 L	0.60 N	7.40	0.180	12
HD08102		37 59 12	120 40 37	0.830	1.81	50	0.250	88	1 L	0.60 N	2.95	0.036	4 L
HD08112		37 59 12	120 40 37	0.990	5.64	80	0.010	172	1 L	0.60 N	4.94	0.096	5
HD08122		37 59 12	120 40 37	0.580	4.20	130	0.008	310	1	0.60 N	4.38	0.180	15
HD08132		37 59 12	120 40 37	0.250	7.24	100	0.002	525	1	0.60 N	1.86	0.230	20
HD08137		37 59 12	120 40 37	0.220	7.08	50	0.002 L	631	2	0.60 N	1.53	0.310	25
HD09005		37 59 44	120 41 15	0.045 N	7.95	10	0.008	195	1 L	0.60 N	3.24	0.070	16
HD09010		37 59 44	120 41 15	0.045	8.03	10 L	0.002	160	1 L	0.60 N	5.31	0.099	4 L
HD09020		37 59 44	120 41 15	0.045 N	6.68	10 L	0.002 L	163	1 L	0.60 N	6.05	0.082	4 L
HD09030		37 59 44	120 41 15	0.087	7.78	10	0.002 L	222	1 L	0.60 N	2.26	0.330	5
HD09040		37 59 44	120 41 15	0.061	7.43	10 L	0.002	259	1 L	0.60 N	6.41	0.066	4 L
HD09060		37 59 44	120 41 15	0.045 N	7.45	10 L	0.002 L	124	1 L	0.60 N	6.94	0.034	4 L
HD09080		37 59 44	120 41 15	0.045 N	4.04	10 L	0.002 L	20	1 L	0.60 N	4.62	0.030 N	4 L
HD09100		37 59 44	120 41 15	0.440	5.14	160	0.002 L	122	1 L	0.60 N	6.51	0.055	4 L
HD09110		37 59 44	120 41 15	0.800	0.24	490	0.008	9	1 L	0.60 N	2.19	0.030 N	4 L
HD09120		37 59 44	120 41 15	0.470	0.26	320	0.050	10	1 L	0.60 N	5.80	0.030 N	4 L
HD09130		37 59 44	120 41 15	0.270	0.18	520	0.006	10	1 L	0.60 N	1.82	0.030 N	4 L
HD09140		37 59 44	120 41 15	0.270	0.19	170	0.002	7	1 L	0.60 N	2.18	0.030 N	4 L
HD09150		37 59 44	120 41 15	0.180	0.13	210	0.002 L	4	1 L	0.60 N	0.71	0.030 N	4 L
HD09164		37 59 44	120 41 15	0.450	2.69	530	0.002 L	97	1 L	0.60 N	7.19	0.057	4 L
HD09170		37 59 44	120 41 15	0.370	2.41	270	0.200	86	1 L	0.60 N	3.85	0.035	4 L
HD09180		37 59 44	120 41 15	0.160	5.01	30	0.004	5	1 L	0.60 N	5.27	0.081	4 L
HD09200		37 59 44	120 41 15	0.045 N	6.33	10 L	0.002 L	33	1 L	0.60 N	5.02	0.045	5
HD09220		37 59 44	120 41 15	0.045 N	5.90	10 L	0.002 N	4	1 L	0.60 N	4.52	0.030 N	4 L
HD09240		37 59 44	120 41 15	0.045 N	5.07	10 L	0.002	6	1 L	0.60 N	4.87	0.039	4 L
HD09260		37 59 44	120 41 15	2.200	4.20	290	0.002 L	107	1 L	0.60 N	5.00	0.067	4 L
HD09270		37 59 44	120 41 15	0.510	5.32	140	0.150	99	1 L	0.60 N	5.53	0.061	5
HD09280		37 59 44	120 41 15	0.360	7.09	100	0.020	143	1	0.60 N	4.25	0.050	4 L
HD09290		37 59 44	120 41 15	0.150	5.55	230	0.002	131	2	0.60 N	4.64	0.044	4 L
HD09300		37 59 44	120 41 15	0.370	6.76	330	0.006	150	1	0.60 N	3.25	0.035	4 L
HD09320		37 59 44	120 41 15	1.600	4.92	290	0.006	82	1 L	0.60 N	5.36	0.078	4 L
HD09330		37 59 44	120 41 15	1.100	3.67	440	0.002	121	1 L	0.60 N	5.59	0.072	4 L
HD09340		37 59 44	120 41 15	0.960	3.75	440	0.100	114	1	0.60 N	6.45	0.075	4 L
HD09350		37 59 44	120 41 15	4.000	5.96	240	0.050	152	2	0.60 N	2.74	0.330	31
HD09370		37 59 44	120 41 15	3.600	8.18	470	0.010	146	3	0.60 N	1.84	0.350	37
HD09390		37 59 44	120 41 15	2.000	8.79	230	0.002	797	3	0.60 N	1.17	0.310	45
HD09410		37 59 44	120 41 15	0.960	7.72	110	0.002 L	680	2	0.60 N	2.57	0.320	33
HD09430		37 59 44	120 41 15	1.800	8.46	230	0.002	725	3	0.60 N	1.88	0.300	42
HD09450		37 59 44	120 41 15	3.700	6.66	340	0.006	226	3	0.60 N	2.87	0.210	35

Appendix 1.--continued

Sam. ID	Co ppm icp	Cr ppm icp	Cu ppm icp	Eu ppm icp	Fe % icp	Ga ppm icp	Hg ppm aa	K % icp	La ppm icp	Li ppm icp	LOI % grav	Mg % icp	Mn ppm icp	Mo ppm picp
HD08032	71	922	92	2 L	7.21	12	0.02 N	0.05 L	3	27	6.01	11.60	1250	0.12
HD08042	40	605	52	2 L	4.49	8	0.02 N	0.07	3	24	18.10	6.55	1250	0.09 N
HD08052	17	94	44	2 L	4.03	10	0.30	1.51	7	19	7.66	2.49	780	0.79
HD08062	32	259	59	2 L	6.16	11	0.08	1.73	3	5	12.60	4.50	698	0.22
HD08072	26	116	100	2 L	5.06	11	0.02	1.04	4	4	12.10	3.62	1000	0.24
HD08082	32	259	121	2 L	5.15	11	0.06	1.63	5	2	15.80	3.94	1670	0.35
HD08092	26	299	69	2 L	4.67	11	0.12	2.15	6	2 L	17.70	4.76	1170	0.92
HD08102	10	115	12	2 L	1.69	4 L	0.02 N	0.68	2 L	2 L	5.80	1.66	327	0.10
HD08112	22	167	32	2 L	4.10	11	0.02 N	2.15	3	2 L	17.70	5.07	1070	0.12
HD08122	15	121	30	2 L	3.49	9	0.20	1.49	8	7	11.20	2.57	660	0.50
HD08132	21	137	47	2 L	4.27	13	0.08	1.71	10	4	9.01	2.06	534	0.89
HD08137	18	109	63	2 L	4.55	14	0.10	1.88	12	30	7.08	1.74	618	1.20
HD09005	32	159	89	2 L	6.14	15	0.02 N	0.75	8	19	5.00	2.47	1290	0.47
HD09010	37	309	95	2 L	6.35	17	0.02	1.45	3	15	3.38	4.78	1260	0.12
HD09020	50	763	75	2 L	6.18	17	0.02	1.33	2 L	24	3.79	7.99	1220	0.12
HD09030	34	168	121	2 L	7.01	17	0.08	2.06	3	24	3.65	4.35	1420	0.15
HD09040	36	276	132	2 L	6.31	15	0.02	1.75	3	18	4.70	4.70	1260	0.48
HD09060	49	463	71	2 L	6.33	14	0.02 N	0.53	3	41	3.80	7.22	1300	0.16
HD09080	84	1650	49	2 L	6.48	9	0.02 N	0.05 L	2 L	75	7.67	16.90	1320	0.18
HD09100	50	697	57	2 L	5.43	11	0.28	1.62	2 L	42	20.70	8.59	1540	0.43
HD09110	94	1900	11	2 L	5.27	4	0.50	0.05 L	2 L	10	30.20	15.30	871	0.09 N
HD09120	82	1660	12	2 L	5.02	4 L	1.30	0.06	2 L	17	26.50	12.90	1110	0.09 N
HD09130	86	1980	9	2 L	5.00	4 L	0.30	0.06	2 L	5	27.80	14.40	724	0.09 N
HD09140	115	2380	11	2 L	5.69	4 L	0.36	0.05 L	2 L	9	34.70	20.00	1020	0.09 N
HD09150	90	2100	5	2 L	4.30	4 L	0.20	0.05 L	2 L	11	32.00	21.10	796	0.09 N
HD09164	72	1120	10	2 L	5.87	8	0.08	1.23	2 L	7	30.70	11.40	1200	0.44
HD09170	40	726	34	2 L	3.74	7	0.10	0.97	2	8	14.40	4.86	700	0.20
HD09180	76	1320	77	2 L	6.81	12	0.02 N	0.05 L	2 L	66	16.30	11.80	1310	0.09 N
HD09200	52	696	170	2 L	5.92	11	0.02 N	0.38	4	58	4.04	9.28	1070	0.16
HD09220	80	1710	6	2 L	7.08	13	0.02 N	0.05 L	2 L	100	5.44	13.80	1200	0.09 N
HD09240	75	1270	33	2 L	7.10	12	0.02	0.05 L	2	57	8.44	11.80	1250	0.16
HD09260	59	875	113	2 L	5.59	9	0.28	1.64	2	7	23.80	9.05	1060	0.09 N
HD09270	44	519	85	2 L	4.79	9	0.08	1.14	4	4	17.60	4.96	896	0.34
HD09280	31	377	87	2 L	5.00	13	0.04	1.62	3	5	17.30	5.23	895	0.34
HD09290	52	651	49	2 L	7.74	13	0.04	1.97	2 L	4	24.30	8.18	1290	0.13
HD09300	59	681	91	2 L	7.27	12	0.04	2.11	3	5	21.10	7.41	1190	0.15
HD09320	46	775	31	2 L	4.66	8	0.06	1.19	2 L	4	21.00	7.01	905	0.20
HD09330	63	1120	38	2 L	5.54	10	0.02	1.44	2 L	4	25.10	9.25	1060	0.14
HD09340	55	1110	44	2 L	5.07	9	0.12	1.24	2	16	24.40	8.69	1080	0.31
HD09350	14	87	31	2 L	4.18	14	0.48	2.26	17	8	5.96	1.37	775	5.30
HD09370	22	163	51	2 L	4.75	19	0.34	3.42	20	3	8.04	1.31	399	1.20
HD09390	19	144	80	2 L	4.47	19	0.18	3.58	23	3	8.76	1.47	431	1.80
HD09410	18	132	54	2 L	4.73	17	0.08	2.96	17	4	10.00	1.79	763	1.40
HD09430	25	127	63	2 L	5.09	20	0.12	2.95	21	4	8.65	1.65	755	1.00
HD09450	12	73	51	2 L	3.69	16	0.10	2.76	18	4	6.70	1.24	516	1.20

Appendix 1.--continued

Sam. ID	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	S %	Sb ppm	Sc ppm	SiO2 %	Sr ppm	Te ppm	Th ppm	
	icp	icp	icp	icp	icp	icp	comb	picp	icp	xrf	icp	aa	icp	
HD08032	0.88	4	L	6	408	0.020	9	0.05	L	0.60	N	40	45.60	
HD08042	0.83	4	L	5	230	0.010	4	0.05	L	0.60	N	26	36.80	
HD08052	0.29	4	L	10	74	0.050	20	1.52		1.80		11	64.00	
HD08062	0.89	4	L	8	93	0.030	12	5.30		11.00		37	35.00	
HD08072	2.61	4	L	6	49	0.050	6	1.93		0.94		24	45.70	
HD08082	1.79	4	L	8	102	0.110	8	1.96		2.00		31	38.80	
HD08092	0.62	4	L	10	85	0.009	8	1.50		23.00		33	40.10	
HD08102	0.22	4	L	4	L	36	0.005	L	11	0.90		10	78.30	
HD08112	0.75	4	L	6	71	0.008	6	0.12		5.30		24	46.50	
HD08122	0.36	4	L	9	45	0.040	19	0.85		2.30		16	61.00	
HD08132	2.59	4	L	10	72	0.080	20	0.26		1.30		15	58.00	
HD08137	1.29	4		16	64	0.120	15	0.28		1.60		16	61.90	
HD09005	2.14	4	L	11	61	0.030	6	0.05	L	0.60	N	34	58.10	
HD09010	1.78	4	L	6	92	0.020	4	0.05	L	0.60	N	40	52.70	
HD09020	1.13	4	L	6	179	0.010	5	0.06		0.60	N	48	50.60	
HD09030	1.71	4	L	7	63	0.030	4	0.10		0.60	N	40	55.70	
HD09040	1.58	4	L	7	54	0.020	6	0.14		0.60	N	45	50.30	
HD09060	1.99	4	L	6	146	0.020	5	0.05	L	0.60	N	47	47.90	
HD09080	0.18	4	L	4	824	0.010	7	0.07		0.95		30	42.30	
HD09100	0.11	4	L	4	L	378	0.020	5	0.11		1.80		30	36.40
HD09110	0.03	4	L	4	L	872	0.005	L	12	0.09		4	34.30	
HD09120	0.14	4	L	4	L	804	0.005	L	11	0.19		5	36.50	
HD09130	0.02	4	L	4	L	761	0.005	L	11	0.07		4	39.60	
HD09140	0.04	4	L	4	L	1380	0.005	L	9	0.12		5	21.80	
HD09150	0.02	4	L	4	L	1430	0.005	L	10	0.05		4	26.60	
HD09164	0.04	4	L	4	L	464	0.005	L	7	0.05	L	24	26.00	
HD09170	0.21	4	L	4	L	249	0.005	L	4	0.31		17	59.50	
HD09180	0.08	4	L	4	L	487	0.009	5	0.05	L	0.60	N	29	38.70
HD09200	2.44	4	L	7	L	272	0.030	6	0.05	L	0.64		39	49.70
HD09220	0.95	4	L	4	L	546	0.010	6	0.05	L	0.60	N	40	44.10
HD09240	1.00	4	L	5	L	421	0.030	6	0.06		0.60	N	37	44.80
HD09260	0.59	4	L	4	L	340	0.006	5	0.11		16.00		30	35.90
HD09270	2.50	4	L	4	L	179	0.005	L	7	0.50		29	43.10	
HD09280	3.14	4	L	5	L	121	0.005	L	5	0.16		31	40.00	
HD09290	1.26	4	L	5	L	225	0.005	6	0.13		2.40		46	29.70
HD09300	1.96	4	L	5	L	302	0.006	8	0.19		1.90		43	33.40
HD09320	1.96	4	L	4	L	282	0.005	L	5	0.07		24	39.40	
HD09330	0.56	4	L	4	L	430	0.005	L	9	0.05		27	35.00	
HD09340	0.70	4	L	4	L	379	0.005	L	11	0.16		23	35.40	
HD09350	1.01	4		17	L	47	0.050	38	3.09		5.80		15	61.30
HD09370	0.47	4		18	L	88	0.070	31	2.95		4.30		17	55.10
HD09390	0.59	5		24	L	71	0.120	13	1.04		2.60		19	55.80
HD09410	0.88	4	L	17	L	72	0.100	12	0.66		1.90		17	54.80
HD09430	1.34	5		22	L	73	0.130	18	1.10		3.30		18	53.70
HD09450	0.23	6		18	L	34	0.070	19	2.23		5.70		15	60.30

Appendix 1.--continued

Sam. ID	Ti % icp	Tl ppm aa	V ppm icp	W ppm aa	Y ppm icp	Yb ppm icp	Zn ppm icp	Geologic unit
HD08032	0.280	0.05 L	200	1.0	10	1	50	Copper Hill Volcanics
HD08042	0.150	0.05	138	1.0	7	1 L	30	Copper Hill Volcanics
HD08052	0.060	0.25	84	3.5	7	1 L	120	Salt Spring Slate, tuffaceous member
HD08062	0.100	0.25	191	8.5	8	1 L	19	Salt Spring Slate, tuffaceous member
HD08072	0.150	0.15	189	4.0	6	1	72	Salt Spring Slate, tuffaceous member
HD08082	0.110	0.25	208	3.5	9	1 L	94	Salt Spring Slate, tuffaceous member
HD08092	0.040	0.35	185	6.0	7	1 L	56	Salt Spring Slate, tuffaceous member
HD08102	0.020	0.15	51	2.5	2	1 L	9	Salt Spring Slate, tuffaceous member
HD08112	0.060	0.35	165	5.0	4	1 L	31	Salt Spring Slate, tuffaceous member
HD08122	0.060	0.20	94	6.0	8	1 L	74	Salt Spring Slate
HD08132	0.120	0.25	121	4.0	10	1	99	Salt Spring Slate
HD08137	0.210	0.15	141	3.0	13	2	124	Salt Spring Slate
HD09005	0.370	0.10	252	16.0	18	2	68	Copper Hill Volcanics
HD09010	0.300	0.15	252	1.0	20	2	62	Copper Hill Volcanics
HD09020	0.230	0.20	209	1.0	10	1	51	Copper Hill Volcanics
HD09030	0.440	0.25	297	1.5	17	2	238	Copper Hill Volcanics
HD09040	0.330	0.15	283	1.0	14	2	57	Copper Hill Volcanics
HD09060	0.280	0.10	241	1.0	11	1	45	Copper Hill Volcanics
HD09080	0.180	0.05	151	1.0	8	1 L	39	Copper Hill Volcanics
HD09100	0.100	0.30	145	3.0	7	1	58	Copper Hill Volcanics
HD09110	0.005 L	0.05 L	24	1.0	2 L	1 L	164	Copper Hill Volcanics
HD09120	0.005 L	0.05 L	20	2.0	2 L	1 L	71	Copper Hill Volcanics
HD09130	0.005 L	0.05 L	23	1.0	2 L	1 L	183	Copper Hill Volcanics
HD09140	0.005 L	0.05 L	13	1.0	2 L	1 L	54	Copper Hill Volcanics
HD09150	0.005 L	0.05 N	8	1.0	2 L	1 L	17	Copper Hill Volcanics
HD09164	0.020	0.15	107	2.0	5	1 L	37	Copper Hill Volcanics
HD09170	0.030	0.20	95	2.0	3	1 L	19	Copper Hill Volcanics
HD09180	0.030	0.05 L	156	1.0	4	1 L	61	Copper Hill Volcanics
HD09200	0.380	0.05	230	1.0	14	2	16	Copper Hill Volcanics
HD09220	0.270	0.05 L	186	1.0	10	1	19	Copper Hill Volcanics
HD09240	0.250	0.05 L	187	2.0	10	1	47	Copper Hill Volcanics
HD09260	0.040	0.30	136	2.0	4	1 L	36	Copper Hill Volcanics
HD09270	0.060	0.15	148	7.0	5	1 L	31	Copper Hill Volcanics
HD09280	0.070	0.25	188	6.5	4	1 L	30	Copper Hill Volcanics
HD09290	0.120	0.35	213	6.0	6	1 L	45	Copper Hill Volcanics
HD09300	0.120	0.35	201	6.5	5	1 L	48	Copper Hill Volcanics
HD09320	0.040	0.25	126	3.0	4	1 L	29	Copper Hill Volcanics
HD09330	0.030	0.30	147	2.0	5	1 L	32	Copper Hill Volcanics
HD09340	0.030	0.25	132	2.5	5	1 L	37	Copper Hill Volcanics
HD09350	0.150	0.35	199	13.0	11	1	130	Salt Spring Slate
HD09370	0.110	0.30	150	5.0	11	2	131	Salt Spring Slate
HD09390	0.160	0.35	168	5.0	14	2	118	Salt Spring Slate
HD09410	0.130	0.35	147	5.0	12	2	110	Salt Spring Slate
HD09430	0.150	0.40	158	7.5	14	2	122	Salt Spring Slate
HD09450	0.200	0.30	117	6.0	13	2	102	Salt Spring Slate

Appendix 1.--continued

Sam. ID	Latitude	Longitude	Ag ppm picp	Al % icp	As ppm icp	Au ppm aa	Ba ppm icp	Be ppm icp	Bi ppm picp	Ca % icp	Cd ppm picp	Ce ppm icp
HD09470	37 59 44	120 41 15	0.350	6.39	80	0.002 L	488	1	0.60 N	1.42	0.180	19
HD09490	37 59 44	120 41 15	0.350	8.58	40	0.002 N	1140	2	0.60 N	1.12	0.140	19
HD09510	37 59 44	120 41 15	1.100	6.17	230	0.008	143	2	0.60 N	2.40	0.280	24
HD10002	37 59 44	120 41 15	0.430	4.36	100	0.032	338	1 L	0.60 N	1.28	0.130	16
HD10007	37 59 44	120 41 15	0.570	1.34	100	0.350	140	1 L	0.60 N	0.63	0.082	7
HD10012	37 59 44	120 41 15	1.000	3.41	160	0.250	225	1 L	0.60 N	0.11	0.160	11
HD10022	37 59 44	120 41 15	0.860	5.11	50	0.002	381	1	0.60 N	2.72	0.260	16
HD10032	37 59 44	120 41 15	0.440	6.51	70	0.002	644	2	0.60 N	1.45	0.180	18
HD10042	37 59 44	120 41 15	0.220	7.73	70	0.002 L	786	2	0.60 N	0.94	0.150	23
HD10052	37 59 44	120 41 15	0.160	5.92	30	0.002 L	519	1	0.60 N	2.32	0.140	19
HD10062	37 59 44	120 41 15	0.130	6.72	40	0.002 L	625	1	0.60 N	2.36	0.210	12
HD10072	37 59 44	120 41 15	0.095	5.70	30	0.002	329	1 L	0.60 N	2.35	0.150	13
HD10082	37 59 44	120 41 15	0.140	6.26	20	0.002 N	399	1	0.60 N	1.57	0.210	20
HD10092	37 59 44	120 41 15	0.210	8.26	20	0.002 N	672	2	0.60 N	1.08	0.160	17
HD10102	37 59 44	120 41 15	0.190	6.59	20	0.002 N	590	1	0.60 N	2.50	0.180	16
HD11002	37 59 44	120 41 15	0.120	3.59	40	0.008	89	1 L	0.64	0.32	0.033	4 L
HD11007	37 59 44	120 41 15	0.150	5.95	30	0.002	98	1 L	0.60 N	0.37	0.064	5
HD11012	37 59 44	120 41 15	0.140	6.79	50	0.018	98	1 L	0.60 N	1.43	0.087	5
HD11022	37 59 44	120 41 15	0.055	7.31	10	0.002 L	33	1 L	0.61	5.64	0.071	4 L
HD11032	37 59 44	120 41 15	0.080	7.15	10	0.002 L	36	1 L	0.60 N	5.00	0.047	4 L
HD11042	37 59 44	120 41 15	0.110	6.54	10	0.002	61	1 L	0.60 N	6.46	0.074	4 L
HD11052	37 59 44	120 41 15	0.093	5.17	10 L	0.002	25	1 L	0.60 N	7.43	0.075	4 L
HD11062	37 59 44	120 41 15	0.120	6.51	10 L	0.002 N	283	1 L	0.60 N	6.34	0.077	4 L
HD11072	37 59 44	120 41 15	0.460	5.53	80	0.050	154	1 L	0.60 N	8.02	0.085	4 L
HD11082	37 59 44	120 41 15	0.099	6.08	20	0.002	66	1 L	0.60 N	7.13	0.077	4 L
HD11092	37 59 44	120 41 15	0.046	6.95	20	0.002	101	1 L	0.60 N	5.47	0.045	4 L
HD11102	37 59 44	120 41 15	0.290	6.82	30	0.014	47	1 L	0.60 N	5.36	0.068	4 L
HD11112	37 59 44	120 41 15	0.560	4.98	100	0.150	113	1 L	0.61	6.36	0.071	4 L
HD11122	37 59 44	120 41 15	2.300	1.99	170	0.450	134	1 L	0.62	5.83	0.150	6
HD11132	37 59 44	120 41 15	3.700	5.01	500	0.008	123	1	0.60 N	2.88	0.320	24
HD11142	37 59 44	120 41 15	4.100	4.36	310	0.100	148	1	0.60 N	3.08	0.240	17
HD11152	37 59 44	120 41 15	6.000	4.51	330	0.022	257	2	0.60 N	2.42	0.250	20
HD11162	37 59 44	120 41 15	2.900	5.69	370	0.018	166	2	0.72	3.60	0.200	23
HD11172	37 59 44	120 41 15	4.500	4.89	350	0.016	156	2	0.60 N	2.57	0.210	22
HD11182	37 59 44	120 41 15	5.200	3.92	310	0.400	265	1	0.60 N	2.15	0.190	16
HD11192	37 59 44	120 41 15	2.000	5.08	250	0.030	310	1	0.60 N	3.62	0.250	24
HD11202	37 59 44	120 41 15	0.570	5.86	80	0.004	589	1	0.60 N	2.32	0.250	16
HD11212	37 59 44	120 41 15	0.360	5.85	40	0.002	482	1	0.60 N	2.60	0.280	19
HD11222	37 59 44	120 41 15	0.600	5.78	40	0.020	528	1	0.60 N	2.25	0.200	16
HD12017	37 59 44	120 41 15	0.230	7.77	30	0.018	105	1 L	0.60 N	5.55	0.094	5
HD12022	37 59 44	120 41 15	0.310	8.02	20	0.006	77	1 L	0.60 N	6.32	0.110	4 L
HD12042	37 59 44	120 41 15	0.056	7.93	10	0.002	194	1 L	0.60 N	6.44	0.120	4 L
HD12057	37 59 44	120 41 15	0.045 N	7.93	20	0.004	157	1 L	0.60 N	6.56	0.067	4 L
HD12082	37 59 44	120 41 15	0.068	7.35	10	0.002	50	1 L	0.60 N	7.13	0.057	4 L
HD12102	37 59 44	120 41 15	0.045 N	8.03	10	0.004	36	1 L	0.60 N	7.32	0.074	4 L

Appendix 1.--continued

Sam. ID	Co ppm icp	Cr ppm icp	Cu ppm icp	Eu ppm icp	Fe % icp	Ga ppm icp	Hg ppm aa	K % icp	La ppm icp	Li ppm icp	LOI % grav	Mg % icp	Mn ppm icp	Mo ppm picp
HD09470	16	191	27	2 L	3.17	14	0.02	1.74	10	3	6.52	1.49	365	0.40
HD09490	15	104	59	2 L	4.58	19	0.08	3.45	9	4	8.19	1.29	482	0.87
HD09510	24	94	37	2 L	4.57	14	0.18	2.40	14	3	7.15	1.37	458	0.85
HD10002	18	204	41	2 L	3.93	8	0.10	1.08	9	28	3.98	1.93	616	0.76
HD10007	4	23	15	2 L	1.32	4 L	0.04	0.43	4	5	1.39	0.14	415	0.38
HD10012	29	727	47	2 L	4.12	8	0.12	0.69	6	92	3.57	2.98	793	0.59
HD10022	16	120	40	2 L	4.34	11	0.24	1.51	8	14	8.46	1.95	735	0.87
HD10032	16	114	55	2 L	4.86	14	0.22	2.28	10	10	7.83	1.59	618	1.30
HD10042	20	100	66	2 L	5.49	17	0.22	2.64	12	8	8.15	1.51	679	1.30
HD10052	13	101	41	2 L	3.82	13	0.10	1.53	11	30	6.72	1.49	710	0.66
HD10062	15	145	32	2 L	3.82	14	0.12	1.76	7	34	6.80	1.64	590	0.86
HD10072	14	170	38	2 L	3.25	12	0.06	0.87	7	33	5.93	1.64	566	0.47
HD10082	15	128	30	2 L	3.13	12	0.06	0.97	10	36	4.82	1.59	378	0.60
HD10092	21	127	80	2 L	5.63	18	0.12	1.78	8	62	5.11	2.07	450	2.80
HD10102	16	123	47	2 L	4.20	14	0.08	1.51	9	44	6.11	1.66	625	0.71
HD11002	17	242	59	2 L	3.38	6	0.02	0.56	2 L	18	3.75	1.33	425	0.44
HD11007	29	282	78	2 L	5.34	10	0.02	0.74	2	40	6.11	2.70	659	0.35
HD11012	45	563	97	2 L	6.49	11	0.02	0.54	2	59	7.37	5.12	1000	0.19
HD11022	45	461	90	2 L	6.47	13	0.02 N	0.06	4	43	3.70	6.39	1200	0.16
HD11032	47	508	80	2 L	6.25	12	0.04	0.12	3	45	4.17	6.08	1120	0.22
HD11042	44	389	101	2 L	5.92	12	0.02	0.34	4	42	9.04	5.47	1180	0.81
HD11052	56	840	82	2 L	6.18	10	0.02 N	0.17	3	54	13.80	9.40	1260	1.10
HD11062	39	444	71	2 L	5.72	13	0.02 N	0.34	4	37	9.45	5.42	1260	0.16
HD11072	29	294	79	2 L	5.05	10	0.04	1.53	3	25	16.70	4.94	1140	0.15
HD11082	39	471	75	2 L	5.64	11	0.02	0.40	3	48	11.90	5.52	1150	0.18
HD11092	40	398	91	2 L	6.29	13	0.04	0.14	3	40	4.22	5.40	1200	0.17
HD11102	37	357	103	2 L	6.03	12	0.02	0.47	3	33	9.94	4.72	1130	0.11
HD11112	29	291	71	2 L	5.15	9	0.04	1.29	2	5	17.60	4.72	1110	0.15
HD11122	9	81	27	2 L	2.86	5	0.24	0.54	5	17	11.30	3.32	1310	0.56
HD11132	13	91	26	2 L	3.52	13	0.24	2.07	13	3	5.84	1.49	556	0.91
HD11142	12	72	24	2 L	3.53	11	0.44	1.86	9	3	5.84	1.51	570	0.90
HD11152	11	80	56	2 L	2.72	11	0.24	1.89	11	3	5.01	1.23	503	0.87
HD11162	17	118	44	2 L	3.87	14	0.14	2.18	12	4	6.76	1.80	647	0.96
HD11172	14	72	30	2 L	3.56	12	0.20	2.03	12	3	5.69	1.32	543	0.92
HD11182	10	82	31	2 L	2.51	9	0.24	1.37	8	3	4.14	1.10	383	0.50
HD11192	11	80	43	2 L	3.27	12	0.12	1.79	13	2	8.18	1.77	717	0.73
HD11202	15	144	32	2 L	3.37	12	0.14	1.79	9	4	7.97	1.58	530	0.81
HD11212	15	147	34	2 L	3.41	12	0.08	1.20	12	22	6.51	1.74	646	0.48
HD11222	14	133	33	2 L	3.56	12	0.08	1.17	10	26	5.55	1.66	576	0.65
HD12017	39	452	106	2 L	6.21	14	0.04	0.40	5	35	5.60	4.50	1110	0.36
HD12022	39	385	104	2 L	6.17	15	0.02	0.30	5	35	5.41	4.64	1130	0.85
HD12042	39	473	126	2 L	6.13	15	0.02 N	0.74	4	33	4.21	5.47	1200	0.33
HD12057	37	427	109	2 L	6.03	15	0.02	0.59	4	33	4.68	5.18	1190	0.22
HD12082	36	350	105	2 L	5.73	13	0.02 N	0.39	4	40	7.06	4.82	1190	0.30
HD12102	38	336	132	2 L	6.02	15	0.02 N	0.14	4	40	5.20	4.87	1210	0.39

Appendix 1.--continued

Sam. ID	Na % icp	Nb ppm icp	Nd ppm icp	Ni ppm icp	P % icp	Pb ppm icp	S % comb	Sb ppm picp	Sc ppm icp	SiO2 % xrf	Sr ppm icp	Te ppm aa	Th ppm icp
HD09470	2.03	4 L	10	66	0.060	6	0.16	1.00	13	65.90	184	0.015	4 L
HD09490	0.78	6	10	36	0.100	25	0.26	1.10	18	57.90	107	0.040	7
HD09510	0.61	4 L	14	60	0.070	28	1.96	1.50	13	61.60	291	0.040	5
HD10002	0.92	4 L	9	144	0.040	11	0.05 L	1.50	11	73.50	115	0.040	4 L
HD10007	0.39	4 L	4	19	0.006	8	0.05 L	0.60 N	4	90.40	60	0.025	4 L
HD10012	0.42	4 L	7	247	0.010	9	0.05 L	1.40	14	76.40	36	0.045	4 L
HD10022	1.48	4 L	11	64	0.070	12	0.72	2.60	12	62.50	311	0.025	4 L
HD10032	1.09	5	11	52	0.090	18	0.51	2.60	15	61.60	170	0.035	7
HD10042	1.37	5	13	48	0.110	22	0.53	1.60	17	58.30	140	0.095	8
HD10052	1.36	5	10	42	0.080	11	0.18	0.94	13	65.70	254	0.025	4
HD10062	1.43	4 L	9	64	0.080	7	0.12	1.20	15	63.40	327	0.030	4 L
HD10072	2.27	4 L	8	56	0.060	10	0.10	1.20	12	67.60	262	0.015	4 L
HD10082	2.48	4	10	66	0.050	10	0.16	1.30	12	68.60	238	0.020	4
HD10092	1.79	4 L	11	70	0.120	14	0.50	2.00	20	59.50	175	0.120	6
HD10102	1.49	6	10	54	0.080	9	0.21	1.30	16	63.90	319	0.020	4
HD11002	0.69	4 L	4 L	81	0.010	38	0.05 L	0.60 N	18	79.50	22	0.045	4 L
HD11007	1.41	4 L	4	113	0.020	4 L	0.05 L	0.77	30	66.00	43	0.045	4 L
HD11012	1.47	4 L	6	206	0.020	5	0.05 L	0.82	40	56.50	42	0.050	4 L
HD11022	2.77	4 L	8	190	0.030	6	0.05 L	1.10	44	50.30	53	0.025	4 L
HD11032	2.84	4 L	7	186	0.030	5	0.13	0.76	43	51.20	212	0.050	4 L
HD11042	2.20	4 L	9	154	0.030	5	0.09	0.82	40	47.70	104	0.035	4 L
HD11052	0.08	4 L	6	331	0.020	6	0.05 L	0.69	36	40.70	85	0.015	4 L
HD11062	2.19	4 L	7	148	0.020	5	0.05 L	0.77	37	47.80	96	0.005	4 L
HD11072	0.83	4 L	5	107	0.010	4 L	0.06	0.72	30	42.50	220	0.015	4 L
HD11082	1.56	4 L	8	150	0.030	5	0.05 L	0.67	37	45.80	96	0.010	4 L
HD11092	3.07	4 L	6	137	0.020	6	0.05 L	1.50	42	52.00	106	0.005	4 L
HD11102	2.82	4 L	7	114	0.020	4	0.05	1.10	39	48.00	142	0.005	4 L
HD11112	1.92	4 L	6	105	0.010	4 L	0.16	0.72	31	43.40	284	0.005 L	4 L
HD11122	0.66	4 L	7	35	0.020	14	1.00	1.50	8	62.60	524	0.015	4 L
HD11132	0.43	4 L	14	53	0.030	21	2.60	5.10	12	65.10	246	0.055	4 L
HD11142	0.28	4 L	11	55	0.050	21	2.37	6.00	11	66.30	272	0.100	4 L
HD11152	0.30	4 L	12	46	0.040	18	1.82	12.00	11	69.90	201	0.100	4
HD11162	0.71	4 L	15	61	0.050	20	2.25	3.70	15	60.00	349	0.040	4 L
HD11172	0.31	4 L	14	52	0.060	21	2.34	6.50	12	65.70	255	0.040	4 L
HD11182	0.78	4 L	9	40	0.030	20	1.47	5.00	9	74.10	199	0.025	4 L
HD11192	0.89	4 L	13	41	0.050	16	1.31	2.50	12	62.70	401	0.030	4 L
HD11202	1.66	4 L	10	54	0.060	9	0.24	1.90	13	64.10	280	0.020	4 L
HD11212	2.05	4 L	12	59	0.060	11	0.23	1.60	14	65.20	259	0.020	4 L
HD11222	1.99	4 L	11	56	0.060	11	0.36	1.90	13	66.30	225	0.020	4 L
HD12017	2.00	4 L	8	117	0.030	15	0.15	0.60 N	42	51.50	63	0.015	4 L
HD12022	1.69	4 L	8	106	0.030	19	0.07	1.10	44	51.10	50	0.015	4 L
HD12042	1.85	4 L	6	113	0.020	8	0.05 L	0.60 N	43	50.00	80	0.015	4 L
HD12057	1.82	4 L	7	105	0.030	7	0.07	0.83	43	50.10	75	0.015	4 L
HD12082	1.51	4 L	6	97	0.030	7	0.16	1.40	41	50.50	87	0.010	4 L
HD12102	1.86	4 L	8	96	0.030	6	0.05 L	0.78	41	49.70	71	0.010	4 L

Appendix 1.--continued

Sam. ID	Ti % icp	Tl ppm aa	V ppm icp	W ppm aa	Y ppm icp	Yb ppm icp	Zn ppm icp	Geologic unit
HD09470	0.080	0.20	105	2.5	8	1	82	Salt Spring Slate
HD09490	0.200	0.25	162	3.5	12	2	124	Salt Spring Slate
HD09510	0.100	0.35	121	5.0	10	1	108	Salt Spring Slate
HD10002	0.130	0.20	113	10.0	7	1 L	58	Copper Hill Volcanics
HD10007	0.020	0.10	33	5.0	2	1 L	21	Copper Hill Volcanics
HD10012	0.070	0.10	101	4.5	3	1 L	49	Copper Hill Volcanics
HD10022	0.120	0.15	92	4.0	9	1	89	Salt Spring Slate
HD10032	0.220	0.25	126	4.0	11	1	122	Salt Spring Slate
HD10042	0.200	0.35	160	3.5	12	2	148	Salt Spring Slate
HD10052	0.190	0.30	110	3.0	10	1	78	Salt Spring Slate
HD10062	0.110	0.30	126	3.0	11	1	92	Salt Spring Slate
HD10072	0.120	0.05	102	2.0	9	1	70	Salt Spring Slate
HD10082	0.200	0.10	93	2.0	9	1	76	Salt Spring Slate
HD10092	0.160	0.20	183	2.0	12	2	136	Salt Spring Slate
HD10102	0.230	0.15	133	1.5	12	2	92	Salt Spring Slate
HD11002	0.080	0.10	121	2.0	3	1 L	25	Copper Hill Volcanics
HD11007	0.150	0.10	205	4.5	7	1 L	46	Copper Hill Volcanics
HD11012	0.210	0.10	255	2.0	10	1	55	Copper Hill Volcanics
HD11022	0.310	0.05 N	256	1.5	12	2	53	Copper Hill Volcanics
HD11032	0.290	0.05 N	230	1.5	11	1	50	Copper Hill Volcanics
HD11042	0.290	0.10	244	1.5	11	1	47	Copper Hill Volcanics
HD11052	0.190	0.05	197	1.5	9	1	44	Copper Hill Volcanics
HD11062	0.280	0.10	229	1.0	11	2	43	Copper Hill Volcanics
HD11072	0.070	0.25	198	6.0	8	1 L	32	Copper Hill Volcanics
HD11082	0.220	0.05	210	1.5	10	1	42	Copper Hill Volcanics
HD11092	0.300	0.05 N	246	2.0	11	2	49	Copper Hill Volcanics
HD11102	0.200	0.10	230	3.0	9	1	49	Copper Hill Volcanics
HD11112	0.060	0.20	157	5.0	5	1 L	36	Copper Hill Volcanics
HD11122	0.040	0.15	44	4.0	4	1 L	40	Copper Hill Volcanics
HD11132	0.060	0.30	92	5.5	7	1 L	119	Salt Spring Slate
HD11142	0.050	0.25	85	4.0	7	1 L	66	Salt Spring Slate
HD11152	0.060	0.20	85	4.5	7	1 L	88	Salt Spring Slate
HD11162	0.060	0.25	112	6.5	8	1	67	Salt Spring Slate
HD11172	0.060	0.30	95	5.0	8	1	74	Salt Spring Slate
HD11182	0.060	0.25	60	4.5	5	1 L	51	Salt Spring Slate
HD11192	0.060	0.25	91	7.0	9	1	123	Salt Spring Slate
HD11202	0.090	0.35	105	4.0	8	1 L	88	Salt Spring Slate
HD11212	0.120	0.20	109	3.0	9	1	79	Salt Spring Slate
HD11222	0.140	0.15	100	3.0	9	1	79	Salt Spring Slate
HD12017	0.310	0.05	247	1.5	14	2	64	Copper Hill Volcanics
HD12022	0.320	0.05 N	262	1.5	15	2	60	Copper Hill Volcanics
HD12042	0.340	0.05	264	1.5	14	2	55	Copper Hill Volcanics
HD12057	0.330	0.05	261	1.0	15	2	53	Copper Hill Volcanics
HD12082	0.300	0.05 L	246	1.0	13	2	50	Copper Hill Volcanics
HD12102	0.340	0.05 N	256	1.5	14	2	55	Copper Hill Volcanics

Appendix 1.--continued

Sam. ID	Latitude	Longitude	Ag ppm picp	Al % icp	As ppm icp	Au ppm aa	Ba ppm icp	Be ppm icp	Bi ppm picp	Ca % icp	Cd ppm picp	Ce ppm icp
HD12122	37 59 44	120 41 15	0.410	6.63	10	0.008	94	1 L	0.60 N	6.99	0.084	4 L
HD12132	37 59 44	120 41 15	0.550	6.04	30	0.012	125	1 L	0.60 N	5.34	0.065	4 L
HD12142	37 59 44	120 41 15	0.320	5.30	20	0.008	83	1 L	0.60 N	6.45	0.079	4 L
HD12152	37 59 44	120 41 15	0.180	5.36	10 L	0.002	89	1 L	0.60 N	6.36	0.078	4 L
HD12162	37 59 44	120 41 15	0.380	5.16	70	0.006	105	1 L	0.60 N	5.30	0.065	4 L
HD12172	37 59 44	120 41 15	0.310	3.85	200	0.006	113	1 L	0.60 N	6.07	0.057	4 L
HD12182	37 59 44	120 41 15	2.800	3.03	360	0.450	168	1 L	0.60 N	3.10	0.190	12
HD12192	37 59 44	120 41 15	4.100	4.88	410	0.150	146	1	0.60 N	2.32	0.160	14
HD12202	37 59 44	120 41 15	1.500	5.37	220	0.010	300	1	0.60 N	3.01	0.150	13
HD13002	37 59 44	120 41 15	0.045 N	6.87	20	0.002	108	1 L	0.60 N	6.27	0.075	4 L
HD13007	37 59 44	120 41 15	0.045 N	6.89	10	0.002 L	73	1 L	0.60 N	6.17	0.071	4 L
HD13012	37 59 44	120 41 15	0.045 N	7.38	10	0.002 L	62	1 L	0.60 N	6.84	0.060	4 L
HD13022	37 59 44	120 41 15	0.045 N	7.60	10	0.002	69	1 L	0.60 N	6.69	0.064	4 L
HD13032	37 59 44	120 41 15	0.045 N	7.69	10 L	0.004	44	1 L	0.60 N	4.36	0.041	4 L
HD14200	37 59 44	120 41 15	0.130	4.85	10 L	0.002 L	6	1 L	0.60 N	6.01	0.053	4 L
HD14210	37 59 44	120 41 15	0.061	4.91	10	0.002 L	46	1 L	0.60 N	5.82	0.070	4 L
HD14220	37 59 44	120 41 15	0.750	4.17	390	0.002	115	1	0.60 N	5.81	0.077	4 L
HD14230	37 59 44	120 41 15	0.360	4.67	140	0.004	113	1 L	0.60 N	6.25	0.100	4 L
HD14240	37 59 44	120 41 15	1.000	4.64	300	0.008	99	1	0.60 N	6.32	0.100	4 L
HD14250	37 59 44	120 41 15	0.880	5.58	240	0.002 L	116	1 L	0.60 N	5.36	0.100	4 L
HD14260	37 59 44	120 41 15	0.730	4.83	210	0.010	112	1 L	0.60 N	5.17	0.068	4 L
HD14270	37 59 44	120 41 15	1.300	4.65	250	0.006	80	1 L	0.60 N	7.32	0.130	4 L
HD14280	37 59 44	120 41 15	1.200	3.42	150	0.004	89	1 L	0.60 N	4.94	0.080	4 L
HD14288	37 59 44	120 41 15	9.200	1.73	310	40.000	75	1 L	0.60 N	7.13	0.270	4 L
HD14300	37 59 44	120 41 15	5.000	7.96	340	0.150	330	2	0.60 N	3.55	0.250	26
HD14310	37 59 44	120 41 15	5.100	8.71	800	0.050	67	3	0.60 N	1.32	0.220	55
HD14320	37 59 44	120 41 15	9.200	9.92	620	0.012	60	3	0.60 N	2.55	0.370	34
HD14330	37 59 44	120 41 15	3.100	8.06	520	0.002	113	3	0.60 N	3.75	0.350	41
HD14340	37 59 44	120 41 15	4.100	8.77	370	0.300	535	2	0.60 N	5.48	0.570	22
HD14350	37 59 44	120 41 15	3.100	8.70	450	0.004	152	3	0.60 N	3.35	0.370	44
HD14360	37 59 44	120 41 15	0.860	7.90	180	0.002 L	662	2	0.60 N	2.29	0.250	28
HD14370	37 59 44	120 41 15	1.800	8.16	100	0.002 N	720	2	0.60 N	1.62	0.400	41
HD14380	37 59 44	120 41 15	1.800	7.75	270	0.006	573	2	0.60 N	3.70	0.380	30
HD14390	37 59 44	120 41 15	4.000	9.80	540	0.006	100	3	0.60 N	3.52	0.340	42
MK34002	38 00 14	120 41 53	0.810	5.74	80	0.050	307	1	0.60 N	2.93	0.160	22
MK34007	38 00 14	120 41 53	0.840	1.91	110	1.250	84	1 L	0.60 N	0.03	0.140	8
MK34012	38 00 14	120 41 53	1.000	1.52	60	1.900	81	1 L	0.60 N	0.10	0.080	8
MK34017	38 00 14	120 41 53	0.650	0.55	20	0.300	31	1 L	0.60 N	0.03	0.030 N	4 L
MK34032	38 00 14	120 41 53	0.160	7.03	70	0.018	517	1	0.60 N	0.23	0.410	20
MK34042	38 00 14	120 41 53	1.400	5.77	120	0.100	457	1	0.60 N	2.33	0.300	18
MK34052	38 00 14	120 41 53	1.500	6.60	130	0.004	586	2	0.60 N	1.55	0.310	27
MK34062	38 00 14	120 41 53	0.260	5.35	50	0.002	478	1	0.60 N	5.63	0.200	13
MK34072	38 00 14	120 41 53	0.097	4.69	30	0.002 L	312	1 L	0.60 N	3.30	0.260	15
MK34082	38 00 14	120 41 53	0.250	7.36	40	0.002	622	1	0.60 N	0.32	0.300	24
MK34092	38 00 14	120 41 53	0.250	5.28	40	0.002 L	479	1	0.60 N	2.80	0.280	22

Appendix 1.--continued

Sam. ID	Co ppm icp	Cr ppm icp	Cu ppm icp	Eu ppm icp	Fe % icp	Ga ppm icp	Hg ppm aa	K % icp	La ppm icp	Li ppm icp	LOI % grav	Mg % icp	Mn ppm icp	Mo ppm picp
HD12122	31	347	113	2 L	5.15	11	0.02 N	0.91	3	30	13.60	4.50	1140	0.16
HD12132	32	406	97	2 L	5.02	10	0.02	1.52	2	10	16.50	4.79	994	0.14
HD12142	36	483	73	2 L	4.97	9	0.02 N	0.93	3	27	16.00	5.14	1060	0.16
HD12152	43	649	75	2 L	5.52	10	0.02 N	0.89	3	49	16.80	6.58	1130	0.10
HD12162	33	502	77	2 L	4.76	9	0.08	1.35	2	9	17.70	5.36	936	0.09 N
HD12172	44	910	53	2 L	5.26	8	0.02 N	1.36	2 L	3	23.40	7.46	1030	0.17
HD12182	11	50	29	2 L	3.30	8	0.26	1.06	6	25	5.15	1.69	683	0.44
HD12192	13	114	25	2 L	3.23	10	0.12	1.30	7	4	4.32	1.24	407	0.44
HD12202	14	150	30	2 L	2.98	12	0.04	1.49	7	4	6.11	1.64	604	0.52
HD13002	34	432	146	2 L	5.86	14	0.02 N	0.31	4	19	5.05	4.39	1120	0.15
HD13007	37	418	81	2 L	6.09	12	0.02 N	0.25	3	27	5.01	5.04	1130	0.12
HD13012	35	347	90	2 L	5.99	14	0.02 N	0.23	4	19	3.69	4.27	1230	0.19
HD13022	36	339	90	2 L	6.26	15	0.02 N	0.26	4	26	4.14	4.47	1110	0.20
HD13032	40	381	72	2 L	6.67	14	0.02 N	0.17	3	34	4.99	4.96	1210	0.09 N
HD14200	78	1200	94	2 L	7.17	11	0.04	0.05 L	3	54	11.20	11.40	1420	0.15
HD14210	88	1250	345	2 L	6.83	11	0.04	0.05 L	3	49	17.10	10.60	1150	0.17
HD14220	62	814	33	2 L	5.64	9	0.12	1.73	2	9	24.10	8.71	1220	0.20
HD14230	32	346	60	2 L	4.84	8	0.06	1.22	3	4	19.20	5.56	927	0.16
HD14240	57	797	38	2 L	5.03	9	0.06	1.43	3	5	20.70	6.70	948	0.22
HD14250	53	637	98	2 L	5.79	11	0.04	1.51	3	7	20.70	6.80	1110	0.23
HD14260	42	530	32	2 L	4.13	8	0.10	1.47	3	4	16.30	4.92	762	0.58
HD14270	43	637	59	2 L	4.43	9	0.10	1.08	3	3	21.80	6.55	947	0.18
HD14280	30	396	26	2 L	3.84	7	0.04	1.03	2	3	17.20	5.36	731	0.15
HD14288	42	662	19	2 L	3.23	5	0.88	0.77	2	3	17.30	5.30	837	0.20
HD14300	26	94	79	2 L	4.19	18	0.24	3.01	14	7	0.00 H	1.81	868	0.96
HD14310	16	97	94	2 L	4.86	21	0.32	4.03	27	7	6.85	1.06	280	1.30
HD14320	29	121	57	2 L	6.46	24	0.48	4.14	17	11	9.05	1.35	553	1.60
HD14330	18	134	31	2 L	4.86	18	0.24	3.23	22	3	8.62	1.56	671	1.30
HD14340	15	53	77	2 L	5.05	20	0.28	2.93	13	2	11.00	1.98	1690	0.38
HD14350	19	107	87	2 L	5.17	19	0.18	3.47	24	3	8.44	1.49	526	2.60
HD14360	14	104	50	2 L	3.13	17	0.06	3.21	15	3	7.30	1.23	432	0.90
HD14370	30	138	65	2 L	4.82	18	0.10	3.29	21	3	8.68	1.63	551	1.30
HD14380	19	131	77	2 L	3.76	17	0.10	2.97	17	4	9.20	1.77	718	0.98
HD14390	20	150	130	2 L	5.53	22	0.18	4.07	23	6	9.31	1.67	662	1.50
MK34002	16	86	52	2 L	4.23	13	0.18	1.65	12	21	7.20	1.12	960	0.78
MK34007	8	22	19	2 L	3.08	5	0.06	0.66	4	2	1.69	0.08	48	0.52
MK34012	5	15	13	2 L	1.63	4 L	0.10	0.53	3	3	1.14	0.10	44	0.37
MK34017	2	4	6	2 L	0.65	4 L	0.04	0.08	2 L	2 L	0.74	0.03	14	0.28
MK34032	17	122	35	2 L	3.54	14	0.16	1.71	10	16	3.60	0.42	321	1.10
MK34042	12	80	42	2 L	3.59	13	0.18	1.73	10	7	5.56	0.53	541	1.30
MK34052	14	90	70	2 L	4.95	14	0.18	2.05	14	5	5.69	0.78	598	1.60
MK34062	11	80	21	2 L	3.70	12	0.10	1.30	8	5	11.80	2.00	1420	0.84
MK34072	11	77	32	2 L	4.11	9	0.08	0.78	7	32	7.45	1.49	792	0.91
MK34082	14	104	65	2 L	5.05	15	0.12	1.61	12	52	4.49	1.31	266	1.10
MK34092	18	65	52	2 L	4.65	12	0.12	1.23	11	27	7.67	1.57	908	0.90

Appendix 1.--continued

Sam. ID	Na % icp	Nb ppm icp	Nd ppm icp	Ni ppm icp	P % icp	Pb ppm icp	S % comb	Sb ppm picp	Sc ppm icp	SiO ₂ % xrf	Sr ppm icp	Te ppm aa	Th ppm icp
HD12122	2.42	4 L	5	80	0.050	6	0.12	0.60 N	37	44.60	220	0.010	4 L
HD12132	2.35	4 L	5	117	0.020	6	0.19	0.60 N	33	43.90	446	0.010	4 L
HD12142	1.85	4 L	7	149	0.050	9	0.15	0.60 N	31	45.20	348	0.005	4 L
HD12152	1.00	4 L	5	195	0.050	4 L	0.05	0.60 N	35	43.10	216	0.005	4 L
HD12162	1.84	4 L	6	156	0.020	4	0.13	4.80	28	44.90	239	0.005 L	4 L
HD12172	0.78	4 L	4 L	284	0.005 L	5	0.13	2.50	27	37.70	425	0.005	4 L
HD12182	0.63	4 L	6	29	0.040	12	2.14	1.80	8	70.20	261	0.040	4 L
HD12192	1.78	4 L	8	53	0.030	14	2.49	5.30	10	68.10	210	0.035	4 L
HD12202	1.76	4 L	6	55	0.050	8	1.05	0.90	12	64.90	224	0.020	4 L
HD13002	2.22	4 L	7	133	0.020	109	0.05 L	0.60 N	35	54.30	119	0.020	4 L
HD13007	2.01	4 L	7	129	0.020	6	0.05 L	0.60 N	41	53.10	48	0.010	4 L
HD13012	2.79	4 L	9	103	0.020	6	0.05 L	0.60 N	39	53.00	112	0.010	4 L
HD13022	2.31	4 L	8	106	0.020	6	0.05 L	0.60 N	40	51.90	100	0.010	4 L
HD13032	3.23	4 L	7	123	0.020	5	0.05 L	0.60 N	41	51.70	132	0.005 L	4 L
HD14200	0.39	4 L	7	446	0.010	4 L	0.05 L	1.20	34	42.60	221	0.015	4 L
HD14210	0.23	4 L	7	435	0.010	4 L	0.05 L	1.30	33	39.10	371	0.085	4 L
HD14220	0.25	4 L	5	342	0.005 L	7	0.09	7.70	28	35.90	313	0.005 L	4 L
HD14230	1.76	4 L	7	129	0.005 L	4 L	0.17	4.80	29	43.30	553	0.005 L	4 L
HD14240	1.37	4 L	7	311	0.005 L	6	0.28	2.70	26	39.40	673	0.005 L	4 L
HD14250	1.87	4 L	7	235	0.020	5	0.12	2.60	33	37.50	341	0.020	4 L
HD14260	1.46	4 L	4 L	187	0.005 L	4 L	0.25	6.30	22	48.80	541	0.005	4 L
HD14270	1.98	4 L	6	230	0.005 L	7	0.15	5.90	24	38.40	798	0.060	4 L
HD14280	1.02	4 L	6	158	0.005 L	4 L	0.05	6.60	19	52.10	511	0.005	4 L
HD14288	0.14	4 L	6	278	0.005 L	162	0.44	3.90	17	54.70	731	0.065	4 L
HD14300	1.26	4 L	15	42	0.030	15	2.20	7.90	23	0.00 H	234	0.050	4 L
HD14310	0.38	4 L	25	55	0.020	31	3.91	6.80	17	57.60	113	0.025	8
HD14320	0.56	4 L	22	89	0.090	58	5.58	11.00	20	46.20	179	0.010	7
HD14330	0.49	4 L	22	75	0.100	22	2.88	4.40	17	51.40	282	0.050	5
HD14340	1.41	5	19	41	0.130	11	1.70	2.10	17	43.80	396	0.065	4 L
HD14350	0.58	4 L	23	73	0.080	21	3.02	4.30	19	49.90	287	0.050	5
HD14360	0.35	4 L	17	51	0.090	9	0.94	2.20	17	46.40	191	0.040	6
HD14370	0.53	4 L	22	84	0.120	14	0.80	4.10	18	57.00	140	0.090	7
HD14380	0.71	4 L	18	65	0.070	12	1.16	2.20	16	54.60	272	0.040	6
HD14390	0.36	6	24	84	0.090	28	3.44	5.50	22	45.70	275	0.085	7
MK34002	1.08	7	14	42	0.110	16	0.23	4.30	14	64.50	189	0.050	4 L
MK34007	0.09	4 L	5	16	0.020	18	0.05 L	1.70	7	87.90	13	0.020	4 L
MK34012	0.15	4 L	4 L	10	0.020	29	0.05 L	1.00	4	91.00	13	0.010	4 L
MK34017	0.13	4 L	4 L	6	0.010	33	0.05 L	0.60 N	2 L	95.50	9	0.005	4 L
MK34032	1.79	4 L	10	72	0.090	18	0.05 L	1.70	13	70.00	85	0.045	4 L
MK34042	1.39	4 L	11	43	0.060	17	0.05 L	2.10	12	68.70	95	0.050	4 L
MK34052	1.37	7	15	50	0.100	15	0.05 L	3.60	16	64.50	125	0.065	6
MK34062	1.82	4 L	10	35	0.090	7	0.05 L	1.20	11	56.40	329	0.010	4
MK34072	1.33	4 L	7	41	0.100	16	0.05 L	1.20	11	66.60	320	0.025	4 L
MK34082	1.29	7	16	58	0.120	14	0.14	1.30	16	65.90	92	0.045	8
MK34092	1.07	4 L	13	45	0.100	24	0.54	1.50	13	63.90	330	0.045	4 L

Appendix 1.--continued

Sam. ID	Ti % icp	Tl ppm aa	V ppm icp	W ppm aa	Y ppm icp	Yb ppm icp	Zn ppm icp	Geologic unit
HD12122	0.130	0.10	202	3.0	8	1	41	Copper Hill Volcanics
HD12132	0.070	0.20	178	4.0	5	1 L	33	Copper Hill Volcanics
HD12142	0.070	0.15	170	3.0	5	1 L	36	Copper Hill Volcanics
HD12152	0.060	0.20	186	2.5	5	1 L	40	Copper Hill Volcanics
HD12162	0.060	0.20	163	4.0	5	1 L	28	Copper Hill Volcanics
HD12172	0.030	0.30	145	5.0	5	1 L	33	Copper Hill Volcanics
HD12182	0.100	0.15	59	12.0	6	1 L	64	Salt Spring Slate
HD12192	0.070	0.20	77	6.0	6	1	58	Salt Spring Slate
HD12202	0.080	0.25	89	6.0	7	1 L	66	Salt Spring Slate
HD13002	0.280	0.05 N	231	1.0	11	2	41	Copper Hill Volcanics
HD13007	0.300	0.05 N	248	1.0	11	2	48	Copper Hill Volcanics
HD13012	0.310	0.05 N	246	1.0	12	1	47	Copper Hill Volcanics
HD13022	0.310	0.05 N	271	1.0	13	2	52	Copper Hill Volcanics
HD13032	0.310	0.05 N	261	1.0	13	2	58	Copper Hill Volcanics
HD14200	0.200	0.05 L	176	1.0	9	1	34	Copper Hill Volcanics
HD14210	0.020	0.05 N	167	1.0	6	1 L	23	Copper Hill Volcanics
HD14220	0.040	0.30	140	2.0	4	1 L	37	Copper Hill Volcanics
HD14230	0.030	0.15	135	4.0	5	1 L	26	Copper Hill Volcanics
HD14240	0.030	0.25	142	3.5	5	1 L	28	Copper Hill Volcanics
HD14250	0.040	0.20	188	3.0	5	1 L	39	Copper Hill Volcanics
HD14260	0.070	0.25	138	6.0	4	1 L	21	Copper Hill Volcanics
HD14270	0.020	0.15	120	2.5	5	1 L	29	Copper Hill Volcanics
HD14280	0.030	0.15	108	2.0	4	1 L	21	Copper Hill Volcanics
HD14288	0.010	0.15	73	1.0	4	1 L	90	Copper Hill Volcanics
HD14300	0.100	0.30	213	16.0	7	1	71	Salt Spring Slate
HD14310	0.090	0.55	187	5.0	9	2	98	Salt Spring Slate
HD14320	0.070	0.40	179	9.0	12	2	168	Salt Spring Slate
HD14330	0.160	0.35	149	7.0	13	2	119	Salt Spring Slate
HD14340	0.230	0.25	153	17.0	15	2	227	Salt Spring Slate
HD14350	0.090	0.35	163	6.0	14	2	132	Salt Spring Slate
HD14360	0.090	0.30	153	8.0	11	2	90	Salt Spring Slate
HD14370	0.130	0.45	165	5.0	12	2	135	Salt Spring Slate
HD14380	0.100	0.25	135	9.0	11	2	147	Salt Spring Slate
HD14390	0.260	0.55	200	4.0	15	3	136	Salt Spring Slate
MK34002	0.270	0.20	125	7.0	12	1	71	Copper Hill Volcanics
MK34007	0.060	0.10	73	11.0	5	1 L	45	Copper Hill Volcanics
MK34012	0.090	0.10	52	7.0	3	1 L	25	Copper Hill Volcanics
MK34017	0.010	0.05 N	11	1.0	2 L	1 L	22	Salt Spring Slate
MK34032	0.130	0.30	109	3.0	11	1	122	Salt Spring Slate
MK34042	0.140	0.35	91	3.0	10	1	96	Salt Spring Slate
MK34052	0.270	0.20	133	4.0	13	2	126	Salt Spring Slate
MK34062	0.130	0.25	80	2.0	10	1	88	Salt Spring Slate
MK34072	0.140	0.05	90	1.0	12	1	97	Salt Spring Slate
MK34082	0.290	0.05	157	3.0	16	2	125	Salt Spring Slate
MK34092	0.170	0.20	114	2.5	14	2	106	Salt Spring Slate

Appendix 1.--continued

Sam.	ID	Latitude	Longitude	Ag ppm picp	Al % icp	As ppm icp,	Au ppm aa	Ba ppm icp	Be ppm icp	Bi ppm picp	Ca % icp	Cd ppm picp	Ce ppm icp
MK34102		38 00 14	120 41 53	0.260	6.39	40	0.002 N	598	1	0.60 N	1.98	0.270	18
MK34112		38 00 14	120 41 53	0.120	6.48	20	0.002 N	565	1	0.60 N	1.85	0.320	15
MK34117		38 00 14	120 41 53	0.110	6.07	20	0.002 N	438	1 L	0.60 N	3.51	0.310	13
MK35002		38 00 14	120 41 53	1.400	4.55	130	0.550	201	1	0.60 N	3.46	0.130	19
MK35007		38 00 14	120 41 53	1.700	4.71	150	0.550	342	2	0.60 N	0.80	0.140	20
MK35012		38 00 14	120 41 53	0.460	5.69	100	0.100	430	2	0.60 N	0.06	0.140	21
MK35022		38 00 14	120 41 53	0.120	8.49	20	0.002 L	776	2	0.60 N	0.28	0.440	18
MK35032		38 00 14	120 41 53	0.120	7.20	20	0.002 N	579	1	0.60 N	0.28	0.430	19
MK35042		38 00 14	120 41 53	0.220	7.21	30	0.002 L	594	1	0.78	0.40	0.300	24
MK35052		38 00 14	120 41 53	0.120	7.13	20	0.002 L	545	1	0.60 N	1.04	0.190	22
MK35057		38 00 14	120 41 53	0.100	7.48	20	0.002 N	591	1	0.60 N	0.96	0.190	22
MK62002		38 00 14	120 41 53	0.360	8.01	40	0.100	383	1	0.60 N	1.90	0.130	33
MK62007		38 00 14	120 41 53	0.047	8.99	10 L	0.008	149	2	0.60 N	5.02	0.130	45
MK62012		38 00 14	120 41 53	0.055	7.87	10 L	0.004	149	1	0.60 N	9.35	0.130	39
MK62022		38 00 14	120 41 53	0.260	8.06	30	0.006	260	2	0.60 N	5.98	0.190	29
MK62032		38 00 14	120 41 53	1.200	7.70	220	1.950	285	2	0.60 N	4.13	0.130	32
MK62042		38 00 14	120 41 53	0.710	8.31	40	0.650	288	2	0.60 N	8.13	0.150	30
MK62052		38 00 14	120 41 53	0.045 N	8.39	10 L	0.002 L	160	1	0.60 N	5.76	0.079	53
MK62062		38 00 14	120 41 53	0.060	8.56	10 L	0.004	167	1	0.60 N	7.06	0.085	50
MK62072		38 00 14	120 41 53	0.049	7.18	10 L	0.002 N	183	1	0.60 N	12.40	0.140	40
MK62082		38 00 14	120 41 53	0.045 N	7.88	10 L	0.002 L	124	1	0.60 N	11.80	0.130	41
MK62092		38 00 14	120 41 53	0.045 N	8.26	10 L	0.002 L	175	1	0.60 N	9.69	0.069	43
MK62102		38 00 14	120 41 53	0.045 N	8.22	10 L	0.200	141	1	0.60 N	9.98	0.120	41
MK62112		38 00 14	120 41 53	0.045 N	8.19	10 L	0.090	210	1	0.60 N	10.00	0.075	43
MK62122		38 00 14	120 41 53	0.130	8.88	10	0.002 L	302	1	0.60 N	6.51	0.062	37
MK62132		38 00 14	120 41 53	0.045 N	8.69	10 L	0.005	167	1	0.60 N	7.73	0.072	44
MK62142		38 00 14	120 41 53	0.045 N	8.44	10 L	0.004	183	1	0.60 N	7.33	0.094	47
MK62152		38 00 14	120 41 53	0.045 N	8.98	10 L	0.002 L	187	1	0.60 N	5.37	0.030 N	48
MK62162		38 00 14	120 41 53	0.045 N	9.05	10 L	0.002	173	1	0.60 N	7.31	0.047	49
MK62172		38 00 14	120 41 53	1.500	7.62	170	2.000	299	2	0.60 N	5.92	0.130	29

Appendix 1.--continued

Sam. ID	Co ppm icp	Cr ppm icp	Cu ppm icp	Eu ppm icp	Fe % icp	Ga ppm icp	Hg ppm aa	K % icp	La ppm icp	Li ppm icp	LOI % grav	Mg % icp	Mn ppm icp	Mo ppm picp
MK34102	23	85	64	2 L	4.94	14	0.20	1.43	8	41	5.85	1.58	956	1.10
MK34112	17	102	37	2 L	4.71	13	0.10	1.33	7	43	5.61	1.63	592	0.93
MK34117	14	88	35	2 L	4.13	14	0.08	1.12	8	43	7.00	1.46	863	0.74
MK35002	12	61	41	2 L	3.81	12	0.22	1.67	10	4	7.37	1.13	621	0.79
MK35007	8	92	57	2 L	4.48	11	0.54	1.42	9	14	4.70	0.46	278	1.40
MK35012	41	94	76	2 L	5.73	12	0.28	1.37	9	26	3.99	0.48	433	1.30
MK35022	20	124	63	2 L	5.35	18	0.10	1.91	7	57	4.39	1.51	473	1.50
MK35032	17	107	62	2 L	5.71	15	0.10	1.42	8	56	3.75	1.47	591	2.20
MK35042	14	108	70	2 L	5.36	15	0.18	1.47	10	55	3.64	1.48	299	1.90
MK35052	11	137	52	2 L	4.91	14	0.10	1.34	11	58	4.05	1.60	366	0.84
MK35057	12	125	57	2 L	4.90	16	0.12	1.49	11	57	4.24	1.59	373	0.88
MK62002	19	89	69	2 L	5.50	17	0.16	1.20	16	35	6.58	1.20	521	0.87
MK62007	23	104	58	2	6.22	20	0.06	0.46	26	36	6.75	1.40	1010	0.27
MK62012	21	92	50	2 L	5.28	17	0.04	0.96	23	35	11.20	1.55	1140	0.36
MK62022	27	122	58	2 L	6.86	18	0.08	2.95	16	14	10.40	0.60	1650	1.10
MK62032	24	79	60	2 L	7.02	21	0.48	3.02	17	7	9.38	1.05	1140	0.99
MK62042	24	68	26	2 L	6.26	21	0.16	3.21	17	6	15.80	1.72	1130	0.75
MK62052	25	41	55	2	6.44	19	0.04	1.24	30	41	6.34	1.59	700	0.23
MK62062	26	59	63	2	6.63	20	0.02	1.16	28	36	7.04	1.73	796	0.21
MK62072	22	58	61	2 L	5.96	18	0.04	1.25	23	25	12.00	1.61	1040	0.24
MK62082	23	74	53	2 L	5.64	19	0.02	0.78	24	25	10.60	1.72	1210	0.22
MK62092	22	72	53	2	5.92	19	0.02	1.27	23	26	8.06	1.80	1050	0.18
MK62102	26	78	58	2	6.08	20	0.02	0.87	23	27	8.23	1.90	1000	0.28
MK62112	22	85	66	2	6.15	20	0.02	1.58	26	28	8.95	1.81	925	0.38
MK62122	27	116	64	2 L	6.65	19	0.02	2.63	21	32	7.46	2.17	761	0.23
MK62132	25	111	59	2	6.17	19	0.02	1.16	25	30	6.55	2.02	802	0.37
MK62142	24	110	59	2	6.93	19	0.04	1.30	25	34	5.95	2.09	609	0.31
MK62152	23	59	42	2	7.76	21	0.04	1.48	24	43	4.24	2.12	546	0.20
MK62162	26	53	53	2	6.88	21	0.02	1.25	28	33	5.45	1.83	701	0.18
MK62172	28	21	53	2 L	5.94	18	0.44	3.29	16	4	12.80	1.98	884	0.24

Appendix 1.--continued

Sam. ID	Na %	Nb ppm	Nd ppm	Ni ppm	P %	Pb ppm	S %	Sb ppm	Sc ppm	SiO ₂ %	Sr ppm	Te ppm	Th ppm
	icp	icp	icp	icp	icp	icp	comb	picp	icp	xrf	icp	aa	icp
MK34102	1.14	4	11	64	0.080	30	0.70	2.40	14	63.80	184	0.095	4 L
MK34112	1.45	4 L	10	58	0.100	13	0.38	1.00	14	64.50	228	0.075	4 L
MK34117	1.52	4 L	10	43	0.090	12	0.20	1.10	13	63.40	363	0.065	4 L
MK35002	0.69	6	11	21	0.100	19	0.57	3.70	12	66.20	183	0.045	4 L
MK35007	0.46	4	9	34	0.070	98	0.12	4.00	12	74.10	93	0.050	5
MK35012	1.01	4 L	13	135	0.070	20	0.05 L	2.00	13	71.30	54	0.040	4 L
MK35022	1.35	5	14	76	0.130	20	0.05 L	1.50	19	62.30	96	0.100	7
MK35032	1.35	4 L	13	69	0.110	20	0.05 L	1.70	15	66.40	84	0.020	5
MK35042	1.38	5	13	63	0.110	22	0.05 L	2.20	14	66.70	85	0.040	5
MK35052	1.43	4	15	62	0.120	13	0.05 L	1.10	14	65.90	101	0.070	6
MK35057	1.47	6	15	59	0.100	12	0.05 L	0.99	15	64.90	104	0.065	6
MK62002	1.55	7	20	40	0.100	28	0.06	2.00	19	60.30	182	0.030	4 L
MK62007	2.41	4 L	31	28	0.160	8	0.05 L	0.60 N	26	51.60	330	0.005 L	4 L
MK62012	2.39	15	29	22	0.180	4 L	0.05 L	0.60 N	22	43.90	339	0.030	4 L
MK62022	0.64	4 L	20	28	0.190	4 L	0.05	0.60 N	23	48.10	82	0.010	4 L
MK62032	0.41	4 L	20	29	0.140	4 L	0.41	0.60 N	21	50.70	166	0.015	4 L
MK62042	0.89	4 L	21	24	0.190	4 L	0.29	0.60 N	21	37.20	290	0.005 L	4 L
MK62052	2.35	4 L	34	27	0.140	4 L	0.05 L	0.60 N	23	50.70	414	0.005 L	4 L
MK62062	2.24	4	33	30	0.170	4 L	0.05 L	0.60 N	24	47.70	367	0.005 N	4 L
MK62072	1.38	4	29	27	0.150	4 L	0.05 L	0.60 N	22	40.40	386	0.005 L	4 L
MK62082	2.02	4 L	31	24	0.160	4 L	0.05 L	0.60 N	23	40.90	324	0.100	4 L
MK62092	2.01	4 L	30	22	0.150	4 L	0.05 L	0.60 N	24	44.20	455	0.005 N	4 L
MK62102	2.18	4 L	28	34	0.140	4 L	0.05 L	0.60 N	25	44.10	479	0.005 L	4 L
MK62112	1.73	6	28	24	0.130	4 L	0.05 L	0.60 N	25	43.10	601	0.005 L	4 L
MK62122	1.20	12	26	30	0.120	4 L	0.06	0.60 N	29	46.40	391	0.005 N	4 L
MK62132	2.38	4 L	29	29	0.120	4 L	0.05 L	0.60 N	28	47.00	498	0.005 N	4 L
MK62142	1.46	5	29	39	0.120	4 L	0.05 L	0.60 N	26	48.60	558	0.005 N	4 L
MK62152	1.61	18	28	28	0.090	4 L	0.05 L	0.60 N	27	50.50	697	0.005 L	4 L
MK62162	2.06	12	33	28	0.150	4 L	0.05 L	0.60 N	26	47.70	755	0.005 L	4 L
MK62172	0.59	4 L	19	19	0.130	4 L	0.78	0.60 N	19	44.10	254	0.010	4 L

Appendix 1.--continued

Sam. ID	Ti %	Tl ppm	V ppm	W ppm	Y ppm	Yb ppm	Zn ppm	Geologic unit
	icp	aa	icp	aa	icp	icp	icp	
MK34102	0.150	0.15	136	1.0	12	1	122	Salt Spring Slate
MK34112	0.150	0.15	119	2.0	11	1	112	Salt Spring Slate
MK34117	0.160	0.10	106	1.5	12	2	98	Salt Spring Slate
MK35002	0.290	0.20	140	15.0	9	1 L	53	Salt Spring Slate
MK35007	0.170	0.20	110	6.0	9	1	119	Salt Spring Slate
MK35012	0.170	0.20	113	2.0	24	2	250	Salt Spring Slate
MK35022	0.170	0.25	179	1.0	13	2	145	Salt Spring Slate
MK35032	0.180	0.20	144	1.5	12	2	146	Salt Spring Slate
MK35042	0.190	0.10	148	1.0	14	2	137	Salt Spring Slate
MK35052	0.220	0.10	138	1.5	14	2	127	Salt Spring Slate
MK35057	0.280	0.10	150	1.5	14	2	132	Salt Spring Slate
MK62002	0.460	0.15	194	3.0	18	2	90	Copper Hill Volcanics
MK62007	0.970	0.05 N	295	1.0	26	3	68	Copper Hill Volcanics
MK62012	0.870	0.05	263	0.5 N	20	2	62	Copper Hill Volcanics
MK62022	0.300	0.35	253	6.0	15	1	76	Copper Hill Volcanics
MK62032	0.310	0.35	224	18.0	13	1	85	Copper Hill Volcanics
MK62042	0.250	0.35	260	14.0	16	2	74	Copper Hill Volcanics
MK62052	0.730	0.05	294	1.0	22	2	71	Copper Hill Volcanics
MK62062	0.930	0.05 N	315	1.0	23	2	70	Copper Hill Volcanics
MK62072	0.790	0.05 N	336	1.0	20	2	54	Copper Hill Volcanics
MK62082	0.810	0.05 N	288	0.5 L	19	2	57	Copper Hill Volcanics
MK62092	0.880	0.05 N	243	0.5 L	19	2	57	Copper Hill Volcanics
MK62102	0.880	0.05 N	302	0.5 L	19	2	58	Copper Hill Volcanics
MK62112	0.900	0.05 N	232	0.5	22	2	57	Copper Hill Volcanics
MK62122	0.880	0.10	242	5.0	19	2	63	Copper Hill Volcanics
MK62132	0.860	0.05 N	246	0.5	21	2	59	Copper Hill Volcanics
MK62142	0.890	0.05 N	183	0.5 L	20	2	58	Copper Hill Volcanics
MK62152	0.970	0.05	199	1.0	19	2	68	Copper Hill Volcanics
MK62162	0.960	0.05 N	245	1.0	24	2	67	Copper Hill Volcanics
MK62172	0.200	0.35	212	7.5	11	1 L	70	Copper Hill Volcanics

Appendix 2.--MINERALOGICAL DATA FOR SAMPLES OF DRILL CORE OR CUTTINGS, HODSON DISTRICT, CALIFORNIA

["0"=looked for but no meaningful value determined. "----" indicates no analysis.

Numbers >100 are estimated by extrapolation]

Sam. ID	White mica	Kaolinite	Chlorite	Quartz	Orthoclase	Plagioclase	Calcite	Ankerite	Magnesite	Pyrite
HD01007	4	3	0	13	12	73	0	0	0	0
HD01012	22	0	0	20	13	30	0	0	0	0
HD01017	25	0	0	23	13	33	0	0	0	0
HD01022	---	---	---	---	---	---	---	---	---	---
HD01032	26	0	0	30	12	45	0	0	0	0
HD01037	---	---	---	---	---	---	---	---	---	---
HD01042	19	0	0	72	7	27	0	0	0	0
HD01047	---	---	---	---	---	---	---	---	---	---
HD01052	23	0	0	26	7	37	0	0	0	0
HD01057	16	0	0	100	7	22	0	0	0	1
HD01062	10	0	0	100	6	10	0	25	0	1
HD01067	---	---	---	---	---	---	---	---	---	---
HD01072	10	0	0	110	0	21	0	0	0	0
HD01077	---	---	---	---	---	---	---	---	---	---
HD01082	21	0	0	74	6	27	0	50	26	2
HD01087	---	---	---	---	---	---	---	---	---	---
HD01092	14	0	0	71	6	48	4	73	31	0
HD01097	---	---	---	---	---	---	---	---	---	---
HD01102	19	0	7	29	0	30	0	100	67	0
HD01107	---	---	---	---	---	---	---	---	---	---
HD01112	25	0	0	47	9	53	0	48	38	6
HD01117	---	---	---	---	---	---	---	---	---	---
HD01122	30	0	0	55	10	63	0	50	52	3
HD01127	---	---	---	---	---	---	---	---	---	---
HD01132	10	4	0	86	0	17	7	54	0	6
HD01137	---	---	---	---	---	---	---	---	---	---
HD02002	2	0	5	33	0	85	4	40	0	0
HD02007	8	5	3	11	0	54	22	15	0	0
HD02012	---	---	---	---	---	---	---	---	---	---
HD02017	9	5	4	7	0	54	3	22	0	4
HD02022	---	---	---	---	---	---	---	---	---	---
HD02032	7	5	5	6	10	57	73	23	0	3
HD02042	---	---	---	---	---	---	---	---	---	---
HD02052	8	10	8	9	11	69	60	17	0	3
HD02062	---	---	---	---	---	---	---	---	---	---
HD02072	5	5	7	6	10	70	100	20	0	0
HD02082	---	---	---	---	---	---	---	---	---	---
HD02092	9	15	11	14	9	37	67	17	0	0
HD02102	---	---	---	---	---	---	---	---	---	---
HD02112	5	5	10	9	10	63	54	18	0	3
HD02122	---	---	---	---	---	---	---	---	---	---
HD02132	6	5	12	10	10	67	41	22	0	4
HD02142	23	10	13	14	0	36	52	10	0	0
HD02152	7	0	0	100	6	27	0	68	0	6
HD02157	23	0	0	73	8	44	0	72	0	6

Appendix 2.--continued

Sam. ID	Mica	Kaolinite	Chlorite	Quartz	Orthoclase	Plagioclase	Calcite	Ankerite	Magnesite	Pyrite
HD02162	22	0	0	60	6	42	0	72	0	10
HD02172	19	0	1	56	8	53	0	54	0	4
HD02182	16	0	12	56	7	45	4	47	0	3
HD02192	---	---	---	---	---	---	---	---	---	---
HD02202	18	0	15	44	9	41	5	30	0	1
HD03002	7	0	4	33	0	29	0	0	0	0
HD03007	14	5	12	11	0	19	0	0	0	0
HD03012	---	---	---	---	---	---	---	---	---	---
HD03022	---	---	---	---	---	---	---	---	---	---
HD03032	8	10	18	6	0	36	79	0	0	4
HD03042	7	10	15	9	0	24	71	0	0	3
HD03052	---	---	---	---	---	---	---	---	---	---
HD03062	---	---	---	---	---	---	---	---	---	---
HD03072	20	20	22	6	5	38	45	0	0	5
HD03082	---	---	---	---	---	---	---	---	---	---
HD03092	---	---	---	---	---	---	---	---	---	---
HD03102	15	10	19	9	6	23	17	0	0	6
HD04002	23	0	0	68	9	17	0	0	0	0
HD04007	18	0	0	98	7	17	0	0	0	0
HD04012	16	0	0	100	6	12	5	16	0	0
HD04022	20	0	0	95	5	70	0	89	0	0
HD04032	26	0	0	50	5	100	0	100	0	0
HD04042	---	---	---	---	---	---	---	---	---	---
HD04052	20	0	1	76	4	32	0	110	22	3
HD04062	---	---	---	---	---	---	---	---	---	---
HD04072	14	0	2	72	7	72	0	86	14	2
HD04082	---	---	---	---	---	---	---	---	---	---
HD04092	12	5	10	71	5	43	0	59	0	2
HD04102	---	---	---	---	---	---	---	---	---	---
HD04112	---	---	---	---	---	---	---	---	---	---
HD04117	16	10	16	69	8	53	5	33	0	6
HD05002	21	0	0	31	6	32	0	14	0	0
HD05007	---	---	---	---	---	---	---	---	---	---
HD05012	30	0	0	25	6	41	62	35	0	0
HD05022	---	---	---	---	---	---	---	---	---	---
HD05032	24	0	0	45	5	28	48	78	0	0
HD05042	---	---	---	---	---	---	---	---	---	---
HD05052	20	0	0	57	4	20	0	120	0	0
HD05062	20	0	0	74	4	39	0	105	0	0
HD05072	11	0	0	93	4	95	0	110	0	4
HD05082	---	---	---	---	---	---	---	---	---	---
HD05092	14	0	0	60	3	4	0	115	20	0
HD05102	16	0	0	47	4	29	0	125	15	0
HD05112	27	0	0	34	5	46	0	110	47	0
HD05117	17	3	8	72	6	30	0	56	16	3

Appendix 2.--continued

Sam. ID	Mica	Kaolinite	Chlorite	Quartz	Orthoclase	Plagioclase	Calcite	Ankerite	Magnesite	Pyrite
HD05122	---	---	---	---	---	---	---	---	---	---
HD05132	19	5	8	42	8	48	0	31	12	3
HD05142	---	---	---	---	---	---	---	---	---	---
HD05152	16	10	13	45	7	33	32	12	0	4
HD05162	---	---	---	---	---	---	---	---	---	---
HD05172	---	---	---	---	---	---	---	---	---	---
HD05182	15	15	17	50	6	46	21	11	0	4
HD05192	---	---	---	---	---	---	---	---	---	---
HD05202	9	15	17	37	0	60	24	11	0	8
HD05212	---	---	---	---	---	---	---	---	---	---
HD05222	2	3	12	25	0	100	19	82	0	0
HD05232	---	---	---	---	---	---	---	---	---	---
HD05242	15	5	6	71	7	30	0	72	0	0
HD06002	22	0	2	54	7	58	0	0	0	0
HD06007	---	---	---	---	---	---	---	---	---	---
HD06012	11	0	13	32	3	68	14	100	0	0
HD06022	---	---	---	---	---	---	---	---	---	---
HD06032	18	0	3	18	5	100	0	100	8	0
HD06042	---	---	---	---	---	---	---	---	---	---
HD06052	20	0	1	67	7	21	0	100	7	2
HD06062	16	5	18	72	6	31	0	71	5	3
HD06072	6	3	21	45	4	33	0	75	2	2
HD06082	13	3	2	29	4	81	0	89	41	10
HD06092	---	---	---	---	---	---	---	---	---	---
HD06097	20	0	4	64	8	24	0	40	54	4
HD07010	0	0	2	3	0	54	1	13	0	0
HD07020	---	---	---	---	---	---	---	---	---	---
HD07030	0	0	23	3	10	22	4	11	0	0
HD07040	---	---	---	---	---	---	---	---	---	---
HD07050	0	0	30	4	5	22	18	4	0	0
HD07059	0	0	42	22	4	8	67	0	0	1
HD07063	10	0	12	41	4	17	12	0	0	7
HD07068	46	0	4	29	7	18	0	77	0	14
HD07080	---	---	---	---	---	---	---	---	---	---
HD07090	37	0	0	34	4	16	0	110	0	10
HD07100	---	---	---	---	---	---	---	---	---	---
HD07110	40	0	0	31	6	20	0	105	0	13
HD07122	---	---	---	---	---	---	---	---	---	---
HD07130	20	0	0	100	0	9	0	100	0	3
HD07140	33	0	0	47	9	21	0	53	0	12
HD07150	21	0	20	36	8	37	0	11	0	5
HD08002	---	---	---	---	---	---	---	---	---	---
HD08007	---	---	---	---	---	---	---	---	---	---
HD08012	---	---	---	---	---	---	---	---	---	---
HD08022	---	---	---	---	---	---	---	---	---	---

Appendix 2.--continued

Sam. ID	Mica	Kaolinite	Chlorite	Quartz	Orthoclase	Plagioclase	Calcite	Ankerite	Magnesite	Pyrite
HD08032	---	---	---	---	---	---	---	---	---	---
HD08042	---	---	---	---	---	---	---	---	---	---
HD08052	---	---	---	---	---	---	---	---	---	---
HD08062	---	---	---	---	---	---	---	---	---	---
HD08072	---	---	---	---	---	---	---	---	---	---
HD08082	---	---	---	---	---	---	---	---	---	---
HD08092	---	---	---	---	---	---	---	---	---	---
HD08102	---	---	---	---	---	---	---	---	---	---
HD08112	---	---	---	---	---	---	---	---	---	---
HD08122	---	---	---	---	---	---	---	---	---	---
HD08132	---	---	---	---	---	---	---	---	---	---
HD08137	---	---	---	---	---	---	---	---	---	---
HD09005	2	5	3	20	7	55	2	13	0	0
HD09010	3	0	8	14	0	39	0	23	0	5
HD09020	3	0	12	7	19	26	0	17	0	9
HD09030	5	5	15	18	13	37	0	5	0	3
HD09040	3	0	9	12	22	36	25	15	0	10
HD09060	1	0	13	2	36	45	5	28	0	13
HD09080	0	0	27	4	8	0	4	4	0	6
HD09100	13	0	18	32	0	2	2	120	43	0
HD09110	0	0	0	84	0	0	26	7	150	0
HD09120	0	0	0	23	0	11	29	38	100	0
HD09130	0	1	0	103	0	0	8	37	130	0
HD09140	0	0	7	29	0	0	26	8	160	0
HD09150	---	---	---	---	---	---	---	---	---	---
HD09164	11	0	2	24	0	3	0	130	110	0
HD09170	---	---	---	---	---	---	---	---	---	---
HD09180	0	0	39	25	1	0	0	110	0	0
HD09200	---	---	---	---	---	---	---	---	---	---
HD09220	0	0	37	6	0	11	1	0	0	8
HD09240	0	0	28	10	4	17	45	0	0	3
HD09260	18	0	0	30	3	19	0	110	105	2
HD09270	---	---	---	---	---	---	---	---	---	---
HD09280	---	---	---	---	---	---	---	---	---	---
HD09290	14	0	0	10	4	34	0	90	110	0
HD09300	---	---	---	---	---	---	---	---	---	---
HD09320	17	0	0	23	3	58	0	110	87	0
HD09330	16	0	0	33	0	19	0	110	95	0
HD09340	---	---	---	---	---	---	---	---	---	---
HD09350	19	0	0	60	6	30	0	54	5	19
HD09370	32	0	0	31	7	18	0	39	13	15
HD09390	---	---	---	---	---	---	---	---	---	---
HD09410	---	---	---	---	---	---	---	---	---	---
HD09430	---	---	---	---	---	---	---	---	---	---
HD09450	---	---	---	---	---	---	---	---	---	---

Appendix 2.--continued

Sam. ID	Mica	Kaolinite	Chlorite	Quartz	Orthoclase	Plagioclase	Calcite	Ankerite	Magnesite	Pyrite
HD09470	18	0	0	58	5	66	10	29	34	0
HD09490	---	---	---	---	---	---	---	---	---	---
HD09510	23	0	0	56	7	23	0	53	16	12
HD10002	7	2	3	57	0	22	3	12	0	0
HD10007	5	0	0	105	0	16	8	2	0	0
HD10012	8	2	9	100	0	12	0	3	0	0
HD10022	21	0	0	63	8	47	2	105	26	4
HD10032	---	---	---	---	---	---	---	---	---	---
HD10042	---	---	---	---	---	---	---	---	---	---
HD10052	19	0	9	77	8	56	0	59	12	0
HD10062	---	---	---	---	---	---	---	---	---	---
HD10072	12	0	10	69	0	82	3	55	0	0
HD10082	---	---	---	---	---	---	---	---	---	---
HD10092	---	---	---	---	---	---	---	---	---	---
HD1D102	16	5	16	47	6	52	19	25	0	0
HD11002	---	---	---	---	---	---	---	---	---	---
HD11007	---	---	---	---	---	---	---	---	---	---
HD11012	2	1	18	41	5	42	12	0	0	0
HD11022	0	0	15	3	6	70	10	19	0	8
HD11032	0	0	19	6	0	92	11	12	0	6
HD11042	1	5	19	18	0	51	65	0	0	3
HD11052	---	---	---	---	---	---	---	---	---	---
HD11062	---	---	---	---	---	---	---	---	---	---
HD11072	---	---	---	---	---	---	---	---	---	---
HD11082	2	5	24	22	0	39	77	11	0	3
HD11092	---	---	---	---	---	---	---	---	---	---
HD11102	3	5	17	16	0	66	36	36	0	1
HD11112	10	0	0	32	0	51	2	120	0	0
HD11122	4	0	1	92	0	34	0	110	0	4
HD11132	---	---	---	---	---	---	---	---	---	---
HD11142	21	0	0	77	6	14	0	71	0	14
HD11152	---	---	---	---	---	---	---	---	---	---
HD11162	17	0	0	56	4	29	0	77	0	11
HD11172	---	---	---	---	---	---	---	---	---	---
HD11182	---	---	---	---	---	---	---	---	---	---
HD11192	20	0	0	68	6	43	0	90	0	9
HD11202	---	---	---	---	---	---	---	---	---	---
HD11212	---	---	---	---	---	---	---	---	---	---
HD11222	11	0	7	61	4	64	2	47	0	3
HD12017	---	---	---	---	---	---	---	---	---	---
HD12022	2	0	12	14	0	45	3	31	0	0
HD12042	---	---	---	---	---	---	---	---	---	---
HD12057	2	4	14	10	0	48	9	29	0	0
HD12082	---	---	---	---	---	---	---	---	---	---
HD12102	0	0	15	18	0	55	16	28	0	0

Appendix 2.--continued

Sam. ID	Mica	Kaolinite	Chlorite	Quartz	Orthoclase	Plagioclase	Calcite	Ankerite	Magnesite	Pyrite
HD12122	---	---	---	---	---	---	---	---	---	---
HD12132	15	0	3	21	4	100	0	105	56	0
HD12142	---	---	---	---	---	---	---	---	---	---
HD12152	---	---	---	---	---	---	---	---	---	---
HD12162	16	0	3	32	0	54	0	110	53	0
HD12172	13	0	0	31	3	24	0	105	98	0
HD12182	15	0	0	98	7	28	0	84	2	0
HD12192	---	---	---	---	---	---	---	---	---	---
HD12202	21	0	0	63	5	72	10	81	10	7
HD13002	---	---	---	---	---	---	---	---	---	---
HD13007	---	---	---	---	---	---	---	---	---	---
HD13012	---	---	---	---	---	---	---	---	---	---
HD13022	---	---	---	---	---	---	---	---	---	---
HD13032	---	---	---	---	---	---	---	---	---	---
HD14200	0	0	40	16	0	7	77	0	0	0
HD14210	---	---	---	---	---	---	---	---	---	---
HD14220	---	---	---	---	---	---	---	---	---	---
HD14230	---	---	---	---	---	---	---	---	---	---
HD14240	14	0	1	32	0	39	0	110	73	0
HD14250	---	---	---	---	---	---	---	---	---	---
HD14260	---	---	---	---	---	---	---	---	---	---
HD14270	15	0	0	25	3	72	0	120	68	0
HD14280	16	0	0	74	4	36	3	105	61	0
HD14288	---	---	---	---	---	---	---	---	---	---
HD14300	38	0	0	37	11	42	0	75	8	10
HD14310	---	---	---	---	---	---	---	---	---	---
HD14320	---	---	---	---	---	---	---	---	---	---
HD14330	---	---	---	---	---	---	---	---	---	---
HD14340	33	0	0	21	12	55	0	100	0	12
HD14350	---	---	---	---	---	---	---	---	---	---
HD14360	---	---	---	---	---	---	---	---	---	---
HD14370	---	---	---	---	---	---	---	---	---	---
HD14380	36	0	0	45	9	27	0	89	0	8
HD14390	---	---	---	---	---	---	---	---	---	---
MK34002	13	2	3	73	5	49	14	33	0	0
MK34007	7	0	0	105	5	4	0	0	0	0
MK34012	12	0	0	110	6	9	0	0	0	0
MK34017	2	0	0	110	0	4	0	0	0	0
MK34032	21	1	2	72	10	76	0	0	0	0
MK34042	23	0	0	73	8	55	27	12	0	0
MK34052	27	0	0	59	9	46	6	19	0	1
MK34062	---	---	---	---	---	---	---	---	---	---
MK34072	11	5	12	75	7	42	10	50	0	0
MK34082	---	---	---	---	---	---	---	---	---	---
MK34092	16	10	12	72	8	31	0	73	0	6

Appendix 2.--continued

Sam. ID	Mica	Kaolinite	Chlorite	Quartz	Orthoclase	Plagioclase	Calcite	Ankerite	Magnesite	Pyrite
MK34102	21	25	24	69	8	38	9	44	0	5
MK34112	---	---	---	---	---	---	---	---	---	---
MK34117	13	10	15	62	5	54	42	23	0	0
MK35002	19	0	0	90	7	31	0	73	0	0
MK35007	12	0	0	83	7	17	0	13	0	0
MK35012	14	4	1	87	8	34	0	6	0	0
MK35022	27	15	22	42	10	46	0	7	0	0
MK35032	18	20	22	65	6	46	0	8	0	0
MK35042	16	10	20	70	7	45	5	8	0	0
MK35052	---	---	---	---	---	---	---	---	---	---
MK35057	16	10	19	56	8	49	12	8	0	0
MK62002	11	5	3	40	9	52	2	16	0	0
MK62007	0	2	0	13	14	58	2	23	0	0
MK62012	5	5	6	12	10	58	91	8	0	0
MK62022	29	0	1	26	5	23	73	0	0	0
MK62032	46	0	0	37	10	24	14	48	0	0
MK62042	40	0	0	13	10	39	25	95	0	0
MK62052	9	15	11	20	12	68	47	11	0	0
MK62062	---	---	---	---	---	---	---	---	---	---
MK62072	10	15	11	12	7	36	100	18	0	0
MK62082	---	---	---	---	---	---	---	---	---	---
MK62092	10	15	12	10	10	55	75	14	0	0
MK62102	6	15	13	9	9	74	68	17	0	0
MK62112	9	10	10	8	8	47	73	12	0	0
MK62122	14	10	11	14	8	33	46	14	0	0
MK62132	---	---	---	---	---	---	---	---	---	---
MK62142	8	10	12	15	8	40	33	17	0	0
MK62152	---	---	---	---	---	---	---	---	---	---
MK62162	8	10	13	12	10	54	30	20	0	0
MK62172	33	0	0	26	9	26	4	100	0	0